



# TO HELP YOU

### ALL NEW for 1958!

On these two pages we have described a promotional idea, called **Sweet Sixteen**, which includes services and materials that we are making available to those bedding plant growers, retail or wholesale, who want to develop a more efficient sales program.

What do you receive?

If you buy bedding plant seed from us, you will receive a "Sweet Sixteen" Sales Kit with our compliments. This kit, containing various posters and printed matter, can help you sell more plants in the limited time you have to devote to sales.

The kit will be mailed in early January—write us if you have not received yours by then—we'll send one off immediately.

Extra copies will be available for a limited time upon request.

Why a limited number of varieties?

We believe that it is uneconomical for the average sized bedding plant grower to sell more than 40 or 50 varieties—some get along with a great deal less. The "Sweet Sixteen" variety selections represent the best variety color in each class of plants which in most cases are useful in all parts of the U. S.

Suppose I don't list all "Sweet 16" varieties?

The promotion will still be useful to you. The posters and other material will create demand for the varieties which you do sell.

### BALL SWEET SIXTEEN SALES PROMOTION KIT CONTAINS:

1. Bedding Plant Posters

Petunias for Summer-Long Color. 16 varieties. Many growers say half their dollar sales are in Petunias.

Annuals, the Heart of Your Garden. 16 varieties. Popular annuals your customers will be certain to ask for.

Special Purpose Annuals. 16 varieties. Features sections for edging, shade-loving, and cut-flower types.

The Glamour Petunia, Pink Magic. This is truly a humdinger, both poster and variety.

A Rhapsody in Blues. Two new "musts" in BLUE Petunias: Blue Lustre (Grandiflora), and Blue Ribbon (Multiflora).

Quality Plants in Jiffy-Pots and Market-Paks. The modern containers setting the pace for self-service.

### 2. Sample Bedding Plant Booklet

Arouse interest in your customers for home gardening. Entitled "Annuals, the Heart of Your Garden", this all new, 12-page booklet with full color illustrations

12-page booklet with full color illustrations gives detailed information on the popular bedding annuals.

Your customers will enjoy browsing through this booklet to pick up ideas on the new varieties, suggestions on planting, arrangements of plantings, etc.

Keep plenty on hand to mail or hand out. You'll find this booklet will be your best silent salesman. A sample booklet is included in the kit.

PRICES: 100 to 900, \$4.00 per 100; 1000 or more, \$35.00 per 1000. Net prepaid. Slightly higher in Canada. Space for your firm name imprint on back cover.

#### 3. Sample Picture Label

Pictures sell—and Sweet Sixteen Picture Labels provide the maximum sales impact on your customers by illustrating the variety right at the point of sale. Authentic full color pictures

... water resistant ... waxed both sides ... sun-fast inks ... room for pricing ... helpful sales information on cards ... size 1 1/8 x 5/8 with pointed end for insertion into pak or flat when ready to sell. Sample in kit.

PRICES: Sets of 48 varieties, 10 each of 48 varieties, \$9.60; 50 each of 48 varieties, \$45.00.

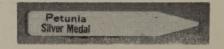
Individual labels available in units of 50 of any one variety. Up to 1000 labels, \$2.00 per 100; 1000 to 5000, \$19.50 per 1000; 5000 up, \$19.00 per 1000. Slightly higher in Canada.



- 4. Bedding Plant Cultural Circular An information sheet for you, filled with valuable tips on improving your bedding plant growing and selling operations.
- 5. Ad Mat Proof Sheet We have prepared newspaper style advertising mats of Bedding Plant ads for use of our customers. Each kit will contain a sheet of reproductions of the ads. If you want to use any of them, you may order mats which we will gladly supply free of charge.

#### **COVER SUBJECT**

All-America Winner Petunia Maytime See page 40



Neat and easily read—water-fast inks that will not smear.

#### SWEET SIXTEEN WOOD POT LABELS

Available in all 48 Sweet Sixteen varieties plus the following:
AGERATUM: Blue Bedder. PANSY: Swiss Giant, Roggli.
PETUNIA: Admiral, Apache, Aztec, Bedding Mixture, Blue
Mantle, California Giant Mixture, Celestial Rose Imp.,
Comanche, Fire Dance, Prima Donna, Popcorn, Silver Medal.
SALVIA: Blaze of Fire. SNAPDRAGON: Tetra Mixture.

 $4 \times 5\%$  in. Pkg. of 100 of any one variety, **80c**, net prepaid. Pkt. of 1000 of any one variety, **\$7.00**, net prepaid. Min. order 100 of one variety. For unprinted wood pot labels see page 74.

### SELL MORE BEDDING PLANTS

#### **SWEET SIXTEEN VARIETIES FOR 1958**

Here are the selected varieties that will appear throughout the promotion on posters, etc.



The Sweet Sixteen symbol appears with each of these varieties as listed in the catalog.

PETUNIAS FOR SUMMER-LONG COLOR



#### Ball All-Double Mixture Ballerina Bingo Blue Lustre

#### Blue Ribbon Crusader Glitters Linda

#### Matador Maytime Paleface Pink Magic

Pink Velvet Red Satin Tango White Magic

#### ANNUALS-THE HEART OF YOUR GARDEN

Ageratum, Blue Mink Celosia, Forest Fire Celosia, Toreador Cleome, Pink Queen

Dahlia, Unwin's Dwarf Mix. Gomphrena, Dot 'n Dash Marigold, Color Magic Marigold, Cupid Mixture

Marigold, Spry Pansy, Ball Giant Mix. Salvia, America Salvia, Royal Blue

Salvia, St. John's Fire Verbena, Ideal Vinca, Coquette Zinnia, Lilliput Mix.

#### SPECIAL PURPOSE ANNUALS

Cutting Aster, Ball Mixture Carnation, Chabaud's Mixture Marigold, Crackerjack Snapdragon, Hit Parade

Zinnia, Cactus Mixture Zinnia, Dahlia-Flowered Mixture

Begonia, Organdy Mixture Coleus, Ball Rainbow Mixture Impatiens, Dwarf Mixture Lobelia, Crystal Palace Low Border

Alvssum, Carpet of Snow

Alyssum, Royal Carpet Marigold, Petite Mixture Phlox, Globe Phlox, Twinkle Portulaca, Double Mixture

(Moss Rose)

#### SWEET SIXTEEN SEED COLLECTIONS

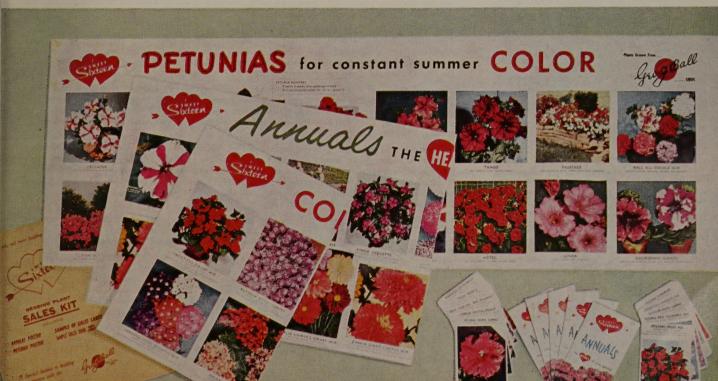
To take full advantage of these sales producing posters and sales aids, we suggest that you include in your annual flower seed order some seed of all of the varieties which will be pictured in full color on the posters.

Sweet Sixteen Offer A. Tr. pkt. each of Sweet Sixteen Petunias (catalog price \$39.00), Collection price, \$35.00.

Sweet Sixteen Offer B. Tr. pkt. each of Sweet Sixteen "Heart of Your Garden" Annuals (catalog price \$8.75), Collection price, \$7.80.

Sweet Sixteen Offer C. Tr. pkt. each of Sweet Sixteen Special Purpose Annuals. (Catalog price \$12.75), Collection price, \$11.40.

Many growers across the Nation used last year's Sweet Sixteen Sales Kit, pictured below, to increase bedding plant sales. This year's kit is even better, with 6 brand new 4-color posters for on-the-spot sales.

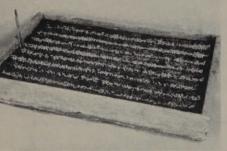


Gro. g. Ball

### GROWING BEDDING PLANTS



Polyethylene sleeves to slip over seed flats. Takes a lot of the guesswork out of ger-mination. Plastic should be removed after



Seedlings in rows instead of broadcastgood protection against damp-off and dry-ing.



Skeleton flat for 6 Market-Paks, 11x22½, used here by Ann and Adolph Backiel, Westport, Connecticut, cheaply made from lath and 1x2.

Bedding plants of all kinds can be grown in Jiffy-Pots for extra quality and convenience in handling.



#### GERMINATION:

These are the essentials: (1) uniform moisture, (2) correct temperature (70° for most annuals), (3) sterile soil and containers, (4) loose fine medium, (5) good seed. Careful growers abide by them religiously for reliable seed performance.

Germinating seed only needs to dry out once briefly to be destroyed.

It's especially vulnerable when the seed is swelling and beginning to crack. We make "trenches" in our seed flats by pressing lath strips down about 1/4 inch, sow our seed in bottoms of these trenches where it stays more evenly moist. Other growers cover flats with glass, mist frequently, or enclose flats in plastic sleeves. Sub-irrigation for the first watering usually carries the seed through to germination.

Temperature is more critical than you may suspect. The warm end of a 60° house does not always provide enough heat for fastest germination. While most heat-loving seeds will eventually sprout at 60 to 65°, they lie exposed to pre-germination dangers for too long a period. All you need is a small room or box heated to 70°.

Light isn't necessary until the day seeds sprout. It's wise to avoid direct sunlight which can dry seeds. Deep covering must be avoided. We don't cover any seed as fine as Snaps and Petunias, are careful to cover larger seeds only lightly. Fertilizer never helps germination, can hinder it. Fresh leaf mold or manure is too potent—use peat instead.

#### SEED TROUBLES:

Damp-off:

Prevention is much easier than cure. If you follow correct germination procedure you should have good results. Use Pano-drench as extra precaution.

After germination:

Don't overwater—water only when needed, then thoroughly.

Give plenty of light and air immediately.

Drop temperature to growing range (50° for most annuals) by transplanting time.

Check essentials: moisture, temperature, sterile conditions, loose fine medium, good seed. Ants or rodents may have carried seed off.

Avoid non-essentials: bright sun, deep covering, excess fertilizer, fresh organic matter.

#### **GROWING:**

Soil. In the North, growers prepare their soil in the summer or fall, store it where it will stay dry and unfrozen until planting time. Starting with a good topsoil, standard practice is to incorporate one part of fibrous peat, leaf mold or manure to every 3 parts of soil. Many growers add 20% super-phosphate, 2 lbs. per yard of soil mix (or a 4-in. potful per wheelbarrow). Sand is sometimes incorporated to loosen heavy soils, but tests have shown that organic matter will do the job. Practically every grower who has facilities is steaming his bedding plant soil. Steaming saves enough weeding time to more than pay for itself, besides helping control diseases.

Transplanting. We like to transplant early, as soon as there is one set of true leaves. This makes for less shock, and may save seedlings from damp-off. We also try to plant shallow. Even if seedlings fall over, they soon right themselves, and we stay away from stem rot due to deep planting. Soil that is moist to start will cushion transplanting shock for the few minutes between transplanting and watering.

Water and feed. We get best results by making the first watering a thorough one. The moist soil then holds plants several days without further attention. After this follow standard watering: let the soil get dry but not bone dry, then water heavily enough to moisten all the soil. Late in the season some bedding plants will need a light feeding with a complete fertilizer.

Temperature and timing. The different bedding plants vary widely in time from seeding to salable plants. Ten weeks is a very rough average, when you germinate at 70° and grow at 50°. Lower temperatures such as in cold frames can mean up to a month longer to finish the crop; late sowings for June and July will mature several weeks faster than average. By the way, many growers tell us the market for fresh young stock in June, July, even August, is worth going after.

Unchecked growth. We feel it is extremely important to avoid any check in fast even growth of bedding plants. Try to scan your cultural practices for any checks due to: drying, overwatering, excessive cold or heat, pests or diseases, overcrowding, poor soil. lack or excess of fertilizer.

If you use any of the dozen containers like Market-Paks instead of flats, your growing techniques may need some alteration. Growers find they can water a given area faster because shallower containers require less water, but must sometimes water more often. Late season feeding will more likely be required. Paks that are retailed by self-service must be kept fairly clean and dry, either in skeleton or full flats, or on gravel, plastic, straw or bare boards.



### SELLING BEDDING PLANTS

#### EFFECTIVE SELLING

Good Stock. We have yet to see anyone with top quality bedding plants who didn't make them pay. That's how important good growing is. Yet some growers and retailers consider bedding plants a poor profit line and wonder why they can't make any money from their inferior stock. The best stock can pull customers clear across a big city and at top prices. All it takes is the same careful attention you would give to growing any good crop. If bedding plants are treated like castoffs, poor cousins, or catchcrops, then quality and profits go to the dogs.

The Unit of Sale. Consider a "Pak" in some size or shape instead of a large flat. "Paks" for growing-selling about a dozen plants have boosted profits for hundreds of bedding plant growers and retailers. The customer gets just the right number of each variety and winds up buying more; the seller saves much labor. This new convenience is worth, and brings, a price premium of 10c or more per dozen to many growers. To forestall haggling, don't grow any full flats at all, or at least do not dig from them.

Superior quality plants of course come in pots. If you grow in pots for superior quality, why not go all out for quality and use Jiffy-Pots? They'll produce better plants than conventional pots every time.

Supporting Information: The best bedding plants are those sold before blooming. Growers all know this, but how to sell plants without flowers? We suggest:

Display full color pictures right with the paks. Small cards in each "pak" and large posters nearby, are a big help. These should have thumbnail sketches of height, spacing, sun or shade, etc. Cards and posters are available in our **Sweet Sixteen** promotion for 1958.

Sample plants in full bloom can substitute for flowers in the containers. Grow these in big boxes or pots to make them too expensive for gardeners to buy.

Bombard consumers with advance propaganda that shows pictures in color, and that drives home the point "buy before bloom". Colorful booklet "stuffers" are available for mailing as part of our Sweet Sixteen promotion. 35 millimeter color slides for projection, showing the novelties and popular varieties for 1958 are available for you to show to clubs and groups during the winter. Write us giving the date you wish to show the slides, and we will loan you a set free of charge.

Convenience. More and more retail layouts are exploiting this asset. They have a large parking lot close by. They keep the sales area orderly and uncrowded so people can find their way around, rather than pushing too much stock in at once and bottling up shopper traffic. Variety and price are marked clearly on every pak.

Community participation. Fan the flames of gardening enthusiasm by getting on the program at local clubs. Talk up varieties, landscape uses, culture, research, breeding—whatever you know that will feed people's gardening hunger! Then your advertising will mean more to them.

Service. This doesn't mean exactly the same that it has in the past. Service is modern and streamlined now. It means let the customer "do-it-himself" but make sure you take all the work out of it first. It goes under the heading "Self-Service."

#### SELF SERVICE

It is helping hundreds of retailers to sell more merchandise with less help in the same space. Weekend crowds can't gum up the works nearly so easily. Profits rise when labor costs go down and volume goes up. Customers are happier, salespeople are less harried. Here's what those who know self-service recommend:

Grow in self-service containers, Paks instead of flats.

Label everything plainly.

Use other good **point-of-sale aids**, since a salesperson won't be doing the selling. Posters, variety cards, sample plants in flower are all effective.

Keep the sales area plenty roomy. Nothing less than a five foot aisle is practical for accommodating heavy traffic.

Avoid dirt or mess-have paved floors and paved parking, kept clean and uncluttered. Provide plenty of free parking close to street and close to check-out.

Supply shopping carts of some sort-good big ones. Coaster wagons also work.

Keep experienced personnel on hand to give advice and counsel. This is the efficient way to use good sales help.

Don't be afraid to advertise your self-service.

Handle lots of related gardening merchandise—people can serve themselves to any garden need.



Market-Pak No. 60 with Asters. Shows typical even growth, self-service size of Paks.



Color sells. Full color pictures make early sales easy, save growing time, give customer better satisfaction.



Self service essentials: Paks (in this case Market-Pak No. 42) plain labeling, plants off ground (on Ball Plant Display Rack here), clean dry floors, plenty of space. Thomas Flower Mart, Syosset, Long Island.

Another aid to self service. Seen at Fairview Flower Farm, Jonesville, Wis.





## Our New Catalog Arrangement . . .

"Change is a fundamental law of Nature", the plant scientists tell us. We have made two changes in our seed catalog this year. We hope they meet with your approval. Let us hear how you like this arrangement—new in these ways:

- Petunias no longer occupy the front pages—they are to be found in alphabetical order in the center of the catalog (pages 38-47). All flower seeds are now strictly alphabetical.
- Annuals and perennials are now combined. In each case the annuals appear first, followed by the perennials. Perennials may be identified readily by **PERENNIAL** at the beginning of the perennial lists wherever they appear.

Also new this year is a general information line as follows:

#### **AGERATUM**

ANNUAL (A. mexicanum) 200,000 S. 3 weeks 65-75° A. mexicanum—refers to genus and species as described according to the best available botanical reference.

200,000 S.—means 200,000 seeds per ounce. 2-3 weeks—indicates usual time required for germination. 65-75°—means normal night temperature range for best germination. In cases where the number of seeds per ounce varies by variety, you will find "S. See below" in the space normally occupied by the number of seeds, and that figure will be given for each variety listed. These figures must NOT be accepted as indicating the number of plants to be expected. Under favorable germinating conditions most large seeds will germinate 60% to 70%. In figuring your seed requirements, keep in mind that it is also good practice to select only the most vigorous seedlings, except in the case of mixtures, when seedlings should be transplanted "as they come."

The dot ( ) indicates varieties most dependably satisfactory in our experience and observation.

#### ACHILLEA

PERENNIAL (A. species) S. See below 1-2 weeks 65-75°

- Filipendula, Parker's Variety (Cloth of Gold). 225,000 S. Large heads of golden yellow flowers on long stems; fine for cutting.
- The Pearl (Ptarmica). 170,000 S. 2½ ft. The standard double white for cutting.

  Prices above 2, each: tr. pkt., 30c; ½ oz., 70c; ¼ oz., \$1.25.

#### **ACHIMENES**

ANNUAL (A. species) 2,000,000 S. 2-3 weeks 65-75° Mixture. Brilliantly colored, trumpet-like flowers in velvety tones of red, violet and white. Makes a nice spring and summer pot plant. Culture same as Gloxinias. Tr. pkt., \$1.50.

#### ACONITUM (Monkshood)

PERENNIAL (A. Napellus) 10,000 S.

Must be exposed to freezing temperature for normal germination. **Napellus.** 4 ft. Dark blue; does best in partial shade. Tr. pkt., **30c**; ¼ oz., **80c**.

#### ACROCLINIUM

ANNUAL (Helipterum roseum) 3,500 S. 2-3 weeks 65-75°

Sensation Giants. An extra large semi-double strain of brightly colored Strawflowers for cutting. Shades of rose, pink and white. Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

#### AGATHAEA

ANNUAL (Felicia amelloides) 27,000 S.

Must be exposed to freezing temperature for normal germination. Coelestis (Blue Daisy). Fairly tall (2 ft.) and useful for outting. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.



#### "GROWER TALKS"

The only commercial monthly publication which is devoted exclusively to flower growing: suggestions for items to grow, sowing dates, insect and disease controls, varieties, etc. Yours for 1 year for \$1.25; 3 years for \$3.50.

Binder for 24 issues of GROWER TALKS, \$1.50.

#### **AGERATUM**

ANNUAL (A. mexicanum) 200,000 S. 3 weeks 65-75° Most seed-produced strains vary somewhat in habit but make satisfactory material for flat sales. Requires 60° for best growth.

Blue Ball Improved. 12 to 14 in. Large flowered, medium blue. Tr. pkt., 35c; ½ oz., 70c; ¼ oz., \$1.30; 1 oz., \$4.25.

- Blue Bedder. 12 in. Fairly uniform in growth and color with medium large, freely produced, bright blue flowers.

  Tr. pkt., 40c; ½ oz., 90c; ½ oz., \$1.60; 1 oz., \$5.00.
- Blue Cap. 10 in. Small, bright orchid-blue flowers freely produced on bushy plants. The most dwarf blue Ageratum.

  Tr. pkt., 40c; ¼ oz., \$1.20; 1 oz., \$3.60.

# Sixteen

#### BLUE MINK

Tetraploid. Large, powder-blue flowers are liberally borne on 12-inch plants. Early blooming and much more uniform than other varieties from seed.

Tr. pkt., 60c; ½ oz., \$1.65; ½ oz., \$3.00; 1 oz., \$9.00.

#### AGERATUM, BLUE MINK



# Grog Ball

#### AGERATUM, Continued

Fairy Pink. 12 in. Shades of lavender-pink. Tr. pkt., 50c; ½ oz., \$1.00; ½ oz., \$1.85; 1 oz., \$6.50.

Golden Ageratum (Lonas inodora). 128,000 S. Large clusters of Ageratum-like golden yellow flowers are freely produced on 12- to 15-inch plants. Very colorful for bedding or borders. Tr. pkt., 40c; ½ oz., 80c; ½ oz., \$1.50; ½ oz., \$2.75.

Imperial Dwarf White. 12 to 15 in. Medium dwarf, creamy white. Tr. pkt., 50c; ½ oz., \$1.25; 1 oz., \$4.00.

Midget Blue. 12 in. Medium sized, clear blue flowers are freely carried on dense, small-leaved plants.

Tr. pkt., 40c; ½ oz., \$1.00; ¼ oz., \$1.75; 1 oz., \$6.00.

**Tall Blue.** 24 to 30 in. Medium sized, light blue. Tall strain for cutting. Tr. pkt.,  $30c; \frac{1}{4}$  oz., 55c; 1 oz., \$1.65.

#### ALOE

ANNUAL (A. species) S. See below 3-4 weeks 65-75° Variegata (Tiger Aloe). 6,500 S. 2-inch pot plants of this attractive green and yellow foliage plant can be produced in less than a year. A valuable item for florists.

100 seeds, \$1.65; 500 seeds, \$7.00; 1000 seeds, \$12.00.

#### ALSTROEMERIA (Lily-of-Peru)

PERENNIAL (A. chilensis) 1600 S. 6-8 weeks 55°

Chilensis. Shades of pink, rose and red. Medium tall. For bedding and cut-flower use. Germination erratic.

Tr. pkt., 55c; ¼ oz., \$1.65; 1 oz., \$5.00.

#### **ALYSSUM**

ANNUAL (Lobularia maritima) 90,000 S. 2 weeks 65-75° All are delightfully fragrant and do well even in poor soils. Valuable for combinations, or bedding and edging.



#### • CARPET OF SNOW

(Snowcloth). Produces a very dense, flat mass of white flowers, 3 to 4 inches high by 8 to 10 inches across.

Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.00; 4 ozs., \$3.35.

Little Gem. 5 in. Dense, rounded heads of white flowers; does not spread.

Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.00; 4 ozs., \$3.00.



#### • ROYAL CARPET =

THE MERICAL STREETON 7 118,000 S. Violet-purple flowers are freely produced on plants about four inches high and ten inches across. Makes a nice border plant.

Tr. pkt., 40c; 1/4 oz., \$1.30; 1 oz., \$3.90; 4 ozs., \$13.00.

Snowdrift (Maritimum tetraploid). Large, snowy white blooms on uniform, 12-inch plants. Satisfactory for cutting. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

Violet King. Dwarf plants, 4 inches high. Deeper in color and more compact than Violet Queen.
Tr. pkt., 45c; ¼ oz., \$1.50; 1 oz., \$4.50; 4 ozs., \$15.00.

Violet Queen. 5 in. Violet flowers borne on dwarf plants. Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80; 4 ozs., \$6.00.

#### ALYSSUM, Continued

PERENNIAL (A. saxatile) 30,000 S. 3-4 weeks 65-75°
The two varieties following are perfectly hardy with us and make fine, free flowering rock garden or border plants.

• Saxatile Compactum (Gold Dust). 12 in. Flowers early May. Rich golden yellow. Tr. pkt., 20c; ¼ oz., 40c; 1 oz., \$1.20.

Saxatile Silver Queen (Sulphureum). Light lemon-yellow. Tr. pkt., 30c; ½ oz., \$1.00; 1 oz., \$3.00.

#### **AMARANTHUS**

ANNUAL (A. tricolor) S. See below 2-3 weeks 65-75° When planted outdoors, all Amaranthus prefer dry, sunny locations. Water very sparingly, if at all, after plants are established.

Molten Fire. 28,000 S. 4 ft. Attractively variegated deep red foliage. Tr. pkt., 25c; 1/4 oz., 70c; 1 oz., \$2.10.

Tricolor Splendens (Joseph's Coat). 60,000 S. 3 ft. Beautiful foliage. Green, red and yellow.
Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

#### **ANCHUSA**

PERENNIAL (A. species) S. See below 3-4 weeks 65-75° Seed should be refrigerated for 72 hours before sowing.

**Dropmore Strain** (Italica). 1100 S. 5 ft. Nice blue for cutting. Tr. pkt., 20c; ¼ oz., 60c; 1 oz., \$1.80.

Myosotidiflora. 10,500 S. 12 in. May flowering, forget-me-notblue. Tr. pkt., 45c; ½ oz., \$1.35; ¼ oz., \$2.50; 1 oz., \$7.50.

#### ANEMONE

PERENNIAL (A. species) 37,000 S. 5-6 weeks 65-75°

Pulsatilla (European Pasque Flower). Beautiful violet-purple flowers on 12-inch plants which are covered with silky hairs. Blooms in April-May; likes a dry location.

Tr. pkt., 40c; ¼ oz., \$1.20; 1 oz., \$3.60.

St. Brigid Mixture. Choice long-stemmed mixture of brilliant colors. Tr. pkt., 55c; ¼ oz., \$1.10; 1 oz., \$3.25.

#### ANTHEMIS

PERENNIAL (A. Kelwayi) 85,000 S, 3-4 weeks 65-75° Kelwayi (Hardy Marguerite). 3 ft. Yellow Daisy flowers produced throughout the summer. 1/4 oz., 35c; 1 oz., \$1.10.

ALYSSUM, ROYAL CARPET



Grag Ball



AQUILEGIA, CRIMSON STAR
The rich contrast of its red and white flowers have made Crimson
Star one of the most popular Aquilegias grown.

#### AQUILEGIA (Columbine)

Though not well adapted for shipping, well grown Columbines are of definite cut-flower value for retail growers. For outdoor growing space plants 12 to 18 inches apart. For forcing, pot up from the field the first year plants, storing in a cold house or frame until about February 1. Start in a low temperature, gradually increasing to around 50°.

Coerulea (Rocky Mountain Columbine). 18 in. Sky-blue with white corolla. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

Copper Queen. 2 ft. Copper-red shades with straw-yellow corolla. Tr. pkt., 55c; ½ oz., \$1.65; ½ oz., \$3.00.

Crimson Star. 18 in. Dark red with white corolla. Tr. pkt., 60c; ½ oz., \$1.75; ¼ oz., \$3.00.

● Long-Spurred Mixture. A well balanced blend with large flowers and long spurs.

Tr. pkt., 40c; ½ oz., \$1.20; ½ oz., \$2.00; 1 oz., \$6.00.

Longissima Yellow. 2 ft. Delicate, pale yellow with extra long (4 in.) spurs. Tr. pkt., 60c; ½6 oz., \$1.80; ½ oz., \$3.30.

#### McKANA'S GIANT VILLIMENCA A SELECTION -

Large, extra long-spurred flowers 3 to 4 inches across in a gay mixture of colors. One of the showiest of all Columbines. Tr. pkt., \$1.00; ½ oz., \$3.00; 1 oz., \$9.00.

Mrs. Nicholls. 2 ft. Large-flowered, clear deep blue. Tr. pkt., 50c; ½ oz., \$1.50; ½ oz., \$2.75; 1 oz., \$9.00.

Mrs. Scott Elliott's Mixture. 2 ft. An excellent long-spurred mixture. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

Rose Queen. 18 in. Rose with white corolla. Tr. pkt., 50c; ½ oz., \$1.50; 1 oz., \$4.50.

**Snow Queen.** 2 ft. Creamy white flowers. Tr. pkt., **50c**; ½ oz., **\$1.50**; 1 oz., **\$4.50**.

#### **ASCLEPIAS**

**PERSINIAL** (A. tuberosa) 4500 S. 3.4 weeks 65-70° **Tuberosa.** 3 ft. Showy, orange flowers. Requires well drained location. Freezing over winter helps germination. Tr. pkt., **35c**; ¼ oz., \$1.30; 1 oz., \$3.90.

#### ARMERIA (Thrift)

PERENNIAL (A. species) S. See below 3-4 weeks 65-70°

Alpina. 32,000 S. 8 in. Dwarf, bright rose.

Tr. pkt., 70c; ½ oz., \$2.10; ½ oz., \$6.30.

#### • GLORY OF HOLLAND

Ball-shaped deep pink flowers about  $1\frac{1}{2}$  inches in diameter, carried on straight, wiry stems 2 feet long. Fine for cutting and blooms throughout the summer. Tr. pkt., 70c;  $\frac{1}{2}$  oz., \$2.10;  $\frac{1}{2}$  oz., \$6.30.

#### ARABIS (Rock Cress)

PERENNIAL (A. species) 120,000 S. 3-4 weeks 65-75°

Alpina Pink. 12 in. Delicate pale pink.

Tr. pkt., 45c; ¼ oz., \$1.30; l oz., \$3.90.

• Alpina Snowcap. 6 in. Dwarf, compact plants with dense masses of shining snow-white flowers. Blooms very early in spring. Tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.75.

Spring Charm (Blepharophylla), 50,000 S. Semi-hardy, carminerose. This variety should be wintered over in frames. Will bloom in April-May. Tr. pkt., 50c; 1/8 oz., \$1.50.

#### **ASPARAGUS**

ANNUAL (A. species) 750 S. 4-6 weeks 70-80° We offer specialist-grown seed which germinates around 65% to 75%.

Plumosus Sprengeri

**Prices** above 2, each: 100 seeds, **30c**; 250 seeds, **70c**; 1000 seeds, **\$2.50**; 5000 seeds, **\$10.00**.

#### **ASTERS**

See pages 8-11.

#### AUBRIETIA

#### PERENNIAL

(A. deltoidea graeca) 150,000 S. 2-3 weeks 65-75° Large-Flowered Mixture (Monarch Strain). 6 in. Low growing, mat-like plants; similar to Arabis but with flowers in a wide range of colors from lilac to purple.

Hendersoni. Deep purple. Leichtlini. Carmine-rose.

Prices above 3, each: tr. pkt., 45c; ½ oz., \$1.30; 1 oz., \$3.90.

Baby's Breath. See Gypsophila, page 26.

Bachelor Button. See Centaurea, page 15.

#### BALSAM

ANNUAL (Impatiens balsamina) 3300 S. 2-3 weeks 65-75° DOUBLE BUSH FLOWERING. 15 in. Attractive double flowers are carried above the foliage in this bush flowering class rather than being hidden in the leaves.

Scarlet Rose Mixture

Prices above 3, each: tr. pkt., 40c; ¼ oz., 75c; 1 oz., \$2.25.

Double Camellia-Flowered Mixture. 2 ft. Tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.50.

#### BAPTISIA (False Indigo)

PERENNIAL (B. australis) 1700 S. 3-4 weeks 65-75°

Australis. 3 ft. Sprays of pea-shaped, indigo-blue flowers.

Tr. pkt., 40c; ¼ oz., 70c; 1 oz., \$2.10.

#### BEGONIAS

See page 12.

#### BELLIS (English Daisy)

PERENNIAL

135,000 S. 1-2 weeks 65-75° (B. perennis var. monstrosa) We have a fine new double strain of this popular English Daisy, much used for early summer bedding and for spring combinations. Though a perennial, it is commonly grown as an annual like Pansies.

> Red Rose White Salmon

Prices above 4, each: tr. pkt., 60c; ½ oz., \$2.00; ¼ oz., \$3.75.

Mixture. Tr. pkt., 60c; 1/8 oz., \$1.80; 1/4 oz., \$3.30.

#### BELLS OF IRELAND

ANNUAL (Molucella laevis)

4200 S. 3-5 weeks 75-80°

This subject has become immensely popular with floral artists the past few years, being used in a wide variety of arrangements. Plants are base-branching with 2 ft. stems closely set with large, bell-like sheaths of translucent green. May be used in the fresh or dried state and is easily grown in greenhouse benches, in pots, or outdoors in summer. Tr. pkt., 40c; \( \frac{1}{4} \) oz., \$1.00; \( 1 \) oz., \$3.00.

#### BROOM

PERENNIAL (Cytisus var.)

5500 S. 6-8 weeks 70-80°

Choice Mixture. 4 to 5 ft. Vigorous, hardy shrubs producing raceme-like flowers in a range of bright colors. Flowers second season from seed. Tr. pkt., 50c; 1/8 oz., \$1.25; 1/4 oz., \$2.35.

#### BROWALLIA

ANNUAL (B. species) S. See below 2-3 weeks 65-75° Good bedding plant for shade and semi-shade.

Speciosa Major.  $111,000~\mathrm{S}.~1\frac{1}{2}$  inch violet-blue flowers are carried on 10- to 12-inch plants. The standard variety for pots. Tr. pkt., \$1.20; \(\frac{1}{16}\) oz., \$3.60; \(\frac{1}{8}\) oz., \$6.60; \(\frac{1}{4}\) oz., \$12.00.

• Viscosa Compacta Sapphire. 240,000 S. Compact growth with a profusion of small attractively light-eyed blue flowers. Tr. pkt., 40c; ½ oz., \$1.10; ½ oz., \$2.00; ½ oz., \$3.80.



BELLS OF IRELAND Popular for floral arrangements, either fresh or dried.

#### FLOWERING CABBAGE

ANNUAL

Under cool late fall and winter conditions this novel plant produces large, showy, fringed leaves in various ivory, light green, pink and purple shades. Sow seed in early July for attractive winter pot plants. Tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

#### CACTUS

ANNUAL

30,000 S. 6 weeks 70-75°

All Sorts, Mixture. Many unusual varieties are included in this choice blend.

Tr. pkt., (about 400 seeds), 65c; 1/4 oz., \$2.00; 1 oz., \$6.00.

#### BALL PLASTICOVER

Here's a brand new idea to simplify your germination problems. The Ball Plasticover is a light gauge flexible plastic tube that fits completely around seed flats. Seeds protected by a Plasticover need no watering and never dry out before germination.

To use the Plasticover, sow the seed in your usual way and water thoroughly. Then cut off a piece of the tubing long enough to slip over the flat and fold under at each end. Leave the Plasticover on until the seeds are well up, then remove and continue normal culture.

Plasticovers work the year around—they help you get the same even germination winter, spring and summer.

PRICE: Per roll, 20 inches in diameter, 100 feet long, \$5.00 prepaid.





#### VIBRA-SEEDER

Many gadgets for hand sowing of seeds have been tried by our growers. We always come back to the Vibra-Seeder. No parts to change, takes all sizes and shapes of seeds with the same easy vibrating action, which assures an even flow of seed and ultimately an even stand of seedlings. Flashlight batteries not included. Price: \$2.25 net.

### End Damp-Off Problems for Good with PANO-DRENCH

Tested extensively by the University of California, New Mexico State College, and many commercial growers with remarkable results. We've used Pano-drench ourselves in our own West Chicago greenhouses for the past two years and have almost completely licked our damp-off problems.

Pano-drench is highly concentrated, low in cost, and easy to apply. One teaspoonful to 3 gallons of water applied with a sprinkling can to flats 24 hours before sowing does the trick. Equally useful for treating bench soils before transplanting seedlings.

Pano-drench is available in 1-, 4- and 16-ounce bottles. One 4-ounce bottle makes 72 gallons of drench and treats approximately 150 to 200 average sized flats or an equivalent bench area. Order yours now and avoid those bedding plant-damp-off losses. 1-oz. bottle, \$1.95; 4-oz. bottle, \$5.95; 16-oz. bottle, \$19.20.

Net, postpaid.



### **Ball Asters**

(WILT RESISTANT-12,000 S.)

#### SEE CULTURAL INSTRUCTIONS ON PAGE 11

ANNUAL (Callistephus chinensis) 12,000 S. 2-3 weeks 65-75°

More growers each year are turning to off-season Asters for a dependable, money-making crop indoors or out—some, in fact, are growing them almost the year around under glass. Treated this way, as a regular greenhouse crop, they require only additional lights, steam sterilized soil, and a 60° house in winter to grow them to perfection—and they'll hold up in the display case or home nearly as long as Mums, an important point.

One thing is essential, though; a strain bred especially for florists' use. Toward this end, we started over 10 years ago to develop the Ball Aster—very few open centers, long strong stems, and large flowers, often 4 inches across.

BALL originator SEED To maintain the full doubleness and high quality of these varieties calls for annual production of specially selected planting stock. Without this constant yearly program, these strains will rapidly revert to the old open-centered types. That's why it's important to buy originator's seed, identi-

fied by the symbol at left. All other is at least 2 generations removed from the originator's controlled line-breeding.

NOTE: Because of their extreme doubleness the true originator's strains of these Asters are shy seeders and are sometimes in short supply. Order early and be sure of your supply.

All the following varieties are Ball Originator Seed.

- White Ball. Large flowers (3½ to 4 in.), exceptional doubleness, and fine, stiff stems. Blooms normally August 25.
- Rose Ball. Rich, deep rose with fully double (3½ to 4 in.), incurved flowers. Blooms normally August 25.
- Purple Ball. Large incurved flowers of bright purple. Blooms normally August 20.
- Pink Ball. Large (3½ to 4 in.), fully double shell-pink flowers. Blooms normally August 20.
- Azure Ball. Fully double (3 to 3½ in.) flowers of clear light
- Blooms normally August 20.
   Phlox Ball. Fully double, medium large flowers of soft peach-
- blossom-pink. Blooms normally September 1.
- Early Pink Ball. 3½-inch flowers, similar to Pink Ball but a week earlier. Blooms normally August 12.



#### • BALL FLORIST MIXTURE =

A formal blend of all the above extra double Ball type Asters. Excellent for bedding or cutting.

Prices above 8, each: tr. pkt., \$1.75; 1/4 oz., \$3.20; 1 oz., \$9.60.

COLLECTION: 1 tr. pkt. each of above named varieties (except Early Pink Ball). 6 pkts., \$9.50.





### DWARF ASTERS FOR POTS

The long keeping quality which cut-flower Asters have in their favor, and which compares satisfactorily with that of Chrysanthemums, is also a point of importance in pot plant Asters. In addition to their lasting qualities—often as long as four weeks in the average home—they offer a variety of colors which can't be had in pot Mums. Bright, true rose-pinks, lavenders and purples are available in addition to pure white and red shades.

We've been working with pot Asters for three years now, both selecting better strains and growing them at different seasons and under varying conditions, so we feel that we have accumulated at least some information of value to growers. Briefly our recommendations at this time are:

- 1. Grow at 60° during the months of October through April.
- Light (same set-up as Mums) up to time terminal bud is the size of a nickel. Only exception is the period from May 1 to September 1. Plants may be shaded from "lights off" date until full bloom in order to bring laterals into flower near same time as terminal.
- Grow in 2¼-inch Jiffy-Pots and shift, especially if panning up 2 or more plants per pot. Permits selecting plants of uniform size.
- 4. Best varieties for different seasons:
  - a. Kirkwells to sow October and November for late January to March flowering.
  - b. Dwarf Queens to sow December and January for April and May flowering. Gerhart Hauptmann also good here.
  - c. Dwarf All Saints to sow March and April for July and August flowering.
- 5. Sales are exceptionally good at Easter and Mother's Day.
- 6. Make unusually nice plants singly in 3- or 4-inch pots or panned in 5's and 6's.

#### ALL SAINTS ROSE

(New). Ideal to sow March-April for July-August flowering. Other colors in this class should be available next season. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.



#### **NEW DWARF QUEENS**

Deep Blue. Violet-blue. Deep Scarlet. Bright, deep scarlet. Pink (Tausendschoen). Rose-pink. • Light Blue. Lilac-blue.

Rose, Rose-pink.White. Pure white.Mixture. All colors.

Prices above 7, each: Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

• Gerhart Hauptmann. Bushy, compact plants heavily covered with 2-inch, ball-like, double flowers of rich, cinnabar-red. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

#### KIRKWELL

Light Pink Deep Rose Crimson Dark Blue Mixture

Prices above 5 varieties, each: Tr. pkt., 75c; ½ oz., \$2.00; 1 oz., \$6.00.

### Wilt-Resistant Asters—Continued OUEEN OF THE MARKET THE ROYALS

Early August-flowering class; rather short-stemmed. Partly resistant. We much prefer the new fully double Ball Strains which can be flowered at this season by additional early lighting. See page 11 for lighting schedules.

Azure-Blue. A clear, light lavender-blue.

Deep rose. Same color as Ball Deep Rose.

Flesh-Pink. Shell-pink; deepening as it matures.

White. The earliest cut-flower white.

Queen of the Market Mixture.

Prices above 5, each: Tr. pkt., 35c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

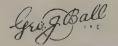
Bloom normally just ahead of the American Branching class.

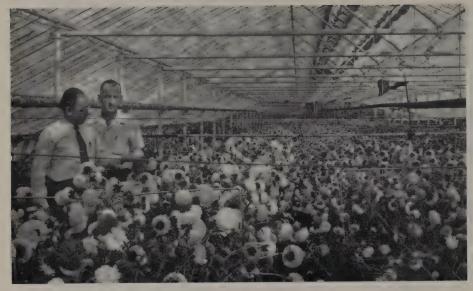
- Azure-Blue. A fine commercial cut-flower variety.
- Ball Deep Rose. Long-stemmed, bright deep rose.
- Ball Deep Purple. A rich, deep color; long stems.
- Ball White Early. A good resistant white.

Shell-pink. A clear shade of pastel pink.

Royal Mixture.

Prices above 6, each: Tr. pkt., 35c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.





Picture at left shows Vic Ball and Phil Jones looking over the Aster flowering trials at West Chicago. Extensive trials such as this are flowered in our greenhouses each year to insure that the seed you buy is true to type and of the top quality for which Geo. J. Ball, Inc. is justly

### Wilt-Resistant Asters—Continued

#### AMERICAN BRANCHING

The standard long-stemmed, midseason class, flowering normally in late August.

Heart of France. Distinctive scarlet-crimson color. Tr. pkt., 40c; ½ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

- Azure-Blue. An excellent, clear light blue.
- Ball White Late. Popular midseason white. Deep Rose. Long stems and large flowers.

Purple. Rich violet-purple. Long-stemmed.

Semple Pink. Standard shell-pink variety.

Sensation. Deep crimson. A favorite in the South.

American Branching Mixture.

Prices above 7, each: Tr. pkt., 35c; ½ oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

#### **PRINCESS**

These types have crested or cushioned Anemone centers, forming fairly hard, medium sized flowers. Normal blooming, late August.

Alice (New). Clear azure-blue.

- Anne. Light peach blossom pink.
- Elizabeth. Fine pure white.
- Goldilocks. Creamy yellow.
- Margaret. Long-stemmed, deep rose.
- Victoria (New). Bright scarlet; the reddest of all Asters. Princess Mixture. Formula blend of the above varieties.

Prices above 7, each: tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$3.00; 4 ozs., \$10.00.

#### SINGLE ASTERS

Single Base-Branching Mixture. Upright, base-branching plants. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 45c; 1 oz., \$1.50; 4 ozs., \$5.00.

Single Rainbow Mixture (Special Florists' Strain). An attractive mixture of medium sized, single blooms. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 45c; 1 oz., \$1.50; 4 ozs., \$5.00.

#### EARLY BEAUTY

A fine, long-stemmed class that blooms normally in late August.

- Azure Fairy. Long-stemmed and large-flowered azure-blue. Deep Rose. A good deep rose.
- Early Beauty Silvery Rose. Fine light rose. Purple. Long-stemmed deep purple. Shell-Pink (September Beauty). Delicate light pink.
- White. Long-stemmed and choice.

Early Beauty Mixture.

Prices above 7, each: tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$3.00; 4 ozs., \$10.00.

#### KING or NEEDLE

(Non-Resistant)

Attractively quilled petals give these flowers hardness and durability for shipping. Blooms normally late August.

Lavender. Good commercial color.

Rose. A fine, deep rose-pink.

Salmon. An unusual shade.

Shell-Pink, Soft satiny pink.

Violet. A rich and striking color.

White. Popular market strain.

King Mixture.

Prices above 7, each:

Tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

#### BOUQUET

A class of upright branching wilt-resistant Asters developed for the cut-flower market. 24-inch plants carry 3-3½ inch, fully double flowers at the top, to be cut as one bunch. Blooms normally, mid-August.

White Rose-Pink Scarlet Azure-Blue

• Powderpuffs. A showy blend of the above and other colors in this class.

Prices above 7, each: tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.



### Wilt-Resistant Asters—Continued

#### SHAGGY TYPES

This includes the Early California Giants and the Cregos. Both have interlaced petals producing a fluffy effect. Blooming dates indicated are for normal season.

California Giant Dark Purple. Highly resistant, rich purple. Sept. 25.

• Early Giant Light Blue. Extra large and early-blooming with full petaled, shaggy flowers of clear, light blue. Aug. 20.

Early Giant Peach Blossom. Pleasing light pink. Aug. 20.

 Early Giant Rose Marie. An excellent large flowered, bright deep rose. Aug. 20.

Early Giant White. Fluffy, pure white flowers. Aug. 20. Early Giants Mixture.

Prices above 6, each; tr. pkt., 40c; ½ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

Crego Azure-Blue. Fine light blue. Sept. 10.

Crego Deep Rose. Fine large-flowered variety. Sept. 10.

Crego Orchid. Attractive orchid-lavender. Sept. 10.

Crego Peach Blossom. Light rose-pink. Sept. 10.

Crego Purple. A rich, bright color. Sept. 10.

Crego Shell-Pink. Light clear pink. Sept. 10.

Crego White. Excellent pure white. Sept. 10.

Crego Mixture.

Prices above 8, each: Tr. pkt., 35c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

#### MISCELLANEOUS MIXTURES

All Purpose Mixture (New). A formula blend of the leading, all double cut flower varieties and types for those who want the most in colors and blooms over a long period.

Tr. pkt., 35c; ½ oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.

• Burpeeana (Non-Resistant). Extra early bedding type mixture which flowers normally in late July. Large, fluffy, Crego type flowers on 18-inch stems. Base branching. Originator's seed. Tr. pkt., \$1.00; ½ oz., \$3.00; 1 oz., \$9.00.

California Super Giant Mixture (Non-Resistant). Choice blend of large, fully double "shaggy-petaled" flowers. Long-stemmed. Late Sept. Tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.25.

Double Varieties Mixture. Cut-flower mixture. Tr. pkt., 30c; ¼ oz., 60c; 1 oz., \$1.90; 4 ozs., \$6.50.

Giant California Sunshine Mixture (Non-Resistant). An attractive mixture of large flowered Anemone type blooms with small center cushions and long ray petals.

Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

Imbricated Pompon Mixture (Non-Resistant). Small, rounded flowers produced on upright growing, compact plants about 15 inches tall. Good for pot plants.

Tr. pkt., 45c; ¼ oz., \$1.30; 1 oz., \$3.90.

Remo Mixture (Non-Resistant). Two-inch flowers with yellow centers are freely produced on upright, branching plants 12-16 inches tall. Suitable for table pot plants or cutting (cut entire plant.) Tr. pkt., 45c; ¼ oz., \$1.25; 1 oz., \$3.75.

#### PERENNIAL ASTER

PERENNIAL (A. species) 19,000 S. 2-3 weeks 70-80°

Alpinus, Finest Mixture. About 15 in. tall. 1½ in. lavender, blue and white flowers. Tr. pkt., 55c; ½ oz., \$1.10.

Hardy Large-Flowered Mixture. About 4 ft. tall. Fall flowering. A perfectly hardy and attractive assortment. Tr. pkt., 55c; ½ oz., \$1.25; ½ oz., \$2.25.

• Wartburg Star (Subcoeruleus). Clear lavender-blue flower with yellow center. For border or cut flowers.
Tr. pkt., 75c; ½ oz., \$2.00; ½ oz., \$6.00.

## Making Ball Asters Pay!

#### **OUTDOOR CULTURE**

"Resistance" to Aster wilt does not mean complete "immunity"! Even the most resistant strains will eventually wilt in thoroughly infested soil, although they are far more satisfactory than non-resistant strains. Our past experience indicates that changing the location of the Aster planting regularly, or steam sterilizing, is a worth-while safety precaution. We sow them 6 weeks before planting-out date. Three weeks after sowing, the seedlings go into Jiffy-Pots or plant bands; three weeks later they're ready for planting out or benching. We space them a foot apart each way in beds so that conventional wire and string may be used for supports. We find cloth house protection a necessity to prevent leaf hoppers from spreading yellows, and to keep plants from growing too hard.

#### OFF-SEASON ASTERS (UNDER GLASS)

Many growers have written us to say that their spring greenhouse Aster crops were the best paying crops that they had on their place. While Asters can be flowered any month of the year, the spring and early summer months seem to be the most profitable. The only important requirements are:  $50^{\circ}$  night temperatures, and additional lighting, which must be supplied continuously from the seedling stage until plants are 20 to 24 inches tall. The only exception is the period from May 1 to September 1, during which day length is long enough. 60 watt bulbs with reflectors, spaced 5 feet apart, or the lighting set-up you use for Mums is satisfactory. Light must be turned on from sundown to 10:00 P. M. daily, or for two hours in the middle of the night.

Spacing is usually 8x8 inches. White Ball, Pink Ball and Rose Ball are especially desirable for off-season culture. Azure Ball, and Purple Ball do equally well, but these colors will be wanted in lesser quantity. Use sterilized soil for best results.

The following schedule worked out at Ohio State checks closely with our own experience where a 50° night temperature was used, although there is more variation from year to year than with Mums.

OPERATION			TIME OF YEAR									
Sow seed Band seedlings Bench plants	Sept. 15	Aug. 15 Sept. 10 Nov. 1 February	Sept. 10 Oct. 1 Dec. 1 March	Oct. 20 Nov. 15 Jan. 1	Dec. 20 Jan. 10 Mar. 1	Feb. 1 Feb. 20 Apr. 1	Mar. 15 Apr. 1 May 15	Apr. 20 May 10 June 15	May 20 June 10 July 15	June 10 July 1 Aug. 1	June 20 July 15 Aug. 20	July 10 Aug. 1 Sept. 1



BEGONIA, BALL RED
A true red Begonia on dwarf, well shaped plant. Free flowering.

#### **DWARF** (4 to 6 Inches)

- Adeline. Very free flowering bright pink; dwarf and compact. Tr. pkt., \$1.50; ½,4 oz., \$3.25; ½,2 oz., \$6.00.
- Ball Deep Rose. In winter the color is a deep rosy red which gradually fades to a luminous pink during warm weather. Ball Orig. Seed. Tr. pkt., \$1.50; 1/34 oz., \$3.25; 1/32 oz., \$6.00.
- Ball Red. Medium large flowers of bright true scarlet are freely produced on fairly dwarf plants. Ball Orig. Seed.
   Tr. pkt., \$1.50; ¼4 oz., \$3.25; ½2 oz., \$6.00.

Ball White. Rather small flowers but very freely produced. Ball Orig. Seed. Tr. pkt., \$1.50; 1/44 oz., \$3.00; 1/42 oz., \$5.50.

Flamingo. Bi-colored white with pink edge. Tr. pkt., \$1.50;  $\frac{1}{164}$  oz., \$4.50.

• Luminosa Compacta. Dwarf, free flowering scarlet-red. Tr. pkt., \$1.50; ½4 oz., \$3.00; ½2 oz., \$5.50.

**Saga.** Extra dwarf and dense growth. Small bright red flowers. Tr. pkt., \$1.50;  $\frac{1}{104}$  oz., \$4.00;  $\frac{1}{32}$  oz., \$7.50.

• Snowbank. Large, glistening white flowers are carried on dense growing plants. The best white.

Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.

Dwarf Varieties Mixture. Our own formula mixture of dwarf varieties. Tr. pkt., \$1.00; ½4 oz., \$2.50; ½2 oz., \$4.50.

#### DWARF BRONZE LEAVED VARIETIES

- Ball Dwarf Carmen. Compact habit with rich bronze leaves and light pink flowers. Ball Orig. Seed.
- Dwarf Indian Maid. The popular scarlet flowers and bronze foliage of Indian Maid in new, dwarf and compact form.
- Frosty. Pure white flowers contrasting vividly with rich bronze-colored leaves. Dwarf and compact. The first bronze-leaved Begonia with white flowers.

Bronze-Leaved Varieties Mixture. Dwarf bronze-leaved plants with red, pink and white flowers. A formula blend.

Prices above 4, each: tr. pkt., \$1.50;  $\frac{1}{64}$  oz., \$3.50;  $\frac{1}{32}$  oz., \$6.50.

#### INTERMEDIATE (6 to 10 Inches)

• Carmen. Bright rose-pink flowers with rich bronze leaves. Tr. pkt., \$1.25; 1/44 oz., \$2.75; 1/32 oz., \$5.00.

### Begonias

#### **FIBROUS ROOTED**

ANNUAL (B. semperflorens)

1,000,000 S. 2-3 weeks 65-75°

Begonias are rapidly increasing in popularity as versatile all-around potted plants. They are equally "at home" in 5-inch pots, as less expensive plants in 3- or 4-inch pots, and in combinations of all sorts. Here is one blooming plant which will do well in the low-light, high temperature conditions of modern homes.

In addition, the stronger growing varieties, especially the F<sub>1</sub> Hybrids, make good bedding plants even in full sun—and for partially shaded spots they are ideal.

Culture: Use neutral (non-acid) peat for germination; no covering over the seed (except paper till they sprout). Keep surface of flat moist. Use half peat, half soil for potting. They must have 60° to keep them moving—and greenhouse shade in summer. Sow in January for flowering 2½'s for May 1, shifting to 4's for Memorial Day.

#### INTERMEDIATE VARIETIES, Continued

• Indian Maid. Foliage a deep lustrous bronze with scarlet flowers. Tr. pkt., \$1.25; \( \frac{1}{264} \) oz., \$2.75; \( \frac{1}{32} \) oz., \$5.00.

King of the Reds. Free flowering carmine-red; vigorous growth. Tr. pkt., \$1.25;  $\frac{1}{164}$  oz., \$2.50;  $\frac{1}{162}$  oz., \$4.75.

Luminosa. Very attractive and popular bright red with green foliage tipped with red. Tr. pkt., \$1.25; ½4 oz., \$3.00; ½2 oz., \$5.50.

Prima Donna. Medium rose-pink. Prefer Scandinavia Pink. Tr. pkt., \$1.25; \( \frac{1}{164} \) oz., \$2.00; \( \frac{1}{32} \) oz., \$3.50.

- Scandinavia Pink. Very free flowering bright rose-pink. Fine bushy habit. Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.
- Scandinavia Red. Identical to the above except for its bright red flowers. Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.

Scandinavia White. A white Scandinavia selection. Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.

#### • SPARKLER =

Large flowers of brilliant orange-salmon with each petal base a contrasting creamy white. The only true salmon Begonia we have ever seen. *Ball Orig. Seed.*Tr. pkt., \$1.50; ½4 oz., \$3.25; ½2 oz., \$6.00.

White Pearl. Medium sized white flowers with green leaves, tinged pink; reddish stems. Tr. pkt., \$1.25; ½4 oz., \$2.50.

Intermediate Varieties Mixture. Made up of the above separate colors. Tr. pkt., \$1.25; \(\frac{1}{2}\)64 oz., \$2.25; \(\frac{1}{2}\)82 oz., \$3.75.

#### TALL CLASS (Over 10 Inches)

Christmas Cheer. Large flowered, deep rose-red. Tr. pkt., \$1.00; \( \frac{1}{64} \) oz., \$2.00; \( \frac{1}{2} \) oz., \$3.75.

Masterpiece. Extra large flowered, light pink. Tr. pkt., \$1.25; ½4 oz., \$2.25; ½2 oz., \$4.00.

Pink Radio. Extra large flowered, rich rose. Tr. pkt., \$1.25; ½4 oz., \$2.25; ½2 oz., \$4.00.

Silver Wings. Extra large, pure white flowers. *Ball Orig. Seed.* Tr. pkt., \$1.00; ½4 oz., \$2.00; ½82 oz., \$3.75.

Tall Varieties Mixture. A formula mixture of the above strong growing sorts. Tr. pkt., \$1.00; ½4 oz., \$2.00; ½2 oz., \$3.75.



### **Begonias**

#### FHYBRID STRAINS

Seed of these varieties is produced by the same method as Hybrid Snaps and Petunias. For absolute uniformity they're unexcelled, and their Hybrid vigor makes them better adapted to outdoor bedding use than the older inbred varieties. Why not try some this year?

- Lucifer (New). Brilliant scarlet flowers with deep, bronzy foliage. This F<sub>1</sub> Hybrid Begonia makes a good outdoor bedding plant. Originator's seed. Tr. pkt., \$1.50.
- Pink Pearl. Resembles Adeline in flower size, rich pink color and uniformly dwarf, compact growth. Originator's seed.
   Tr. pkt., \$1.50.
- Pink Profusion. A vigorous, dense grower with freely produced coral-pink flowers and green leaves with red veins. Did exceptionally well in outdoor trials exposed to full sun and high temperatures. Try this for bedding. Tr. pkt., \$1.50.

Pink Tausendschon. Dwarf. Bright pink; closely resembles Adeline and Pink Pearl in habit. Originator's seed. Tr. pkt., \$2.00.

Red Tausendschon. Same as Pink Tausendschon except for clear red color. Originator's seed. Tr. pkt., \$2.00.

- Red Pearl. Dwarf. Identical to Pink Pearl except for its Luminosa red color. Originator's seed. Tr. pkt., \$1.50.
- Stuttgart (New). Bright pink flowers with rich bronze foliage. Because of its Hybrid vigor, this variety is well suited for outdoor bedding use. Originator's seed. Tr. pkt., \$1.50.



#### ORGANDY MIXTURE

(New). An excellent mixture of F<sub>1</sub> Hybrids in shades of red, pink and white. Plants are uniform in habit and their hybrid vigor makes them well adapted for

outdoor bedding, even in full sun. Tr. pkt., \$1.50.

#### **TUBEROUS ROOTED**

Superb Camellia-flowered, double strains from one of the world's foremost Tuberous Begonia specialists. Sow Dec.-Feb. for May-June sales.

Red Orange Salmon Yellow Scarlet Rose Copper White Prices above 8 separate colors, each:

½ tr. pkt., \$1.75; tr. pkt., \$3.00.

Tuberous Rooted Double Mixture. Camellia-flowered. 90% good doubles. Gorgeous colors. ½ tr. pkt., \$1.75; tr. pkt., \$3.00.

#### OTHER BEGONIAS

Lloydi Mixture. Pendulous. Double flowers, about 2 inches, in shades of scarlet, rose, salmon and white. Fine for hanging baskets. Tr. pkt., \$3.00.

### **Calceolarias**

#### ANNUAL

(C. herbeahybrida) 600,000 S. 2-3 weeks 65-75° Calceolarias aren't at all difficult to grow from seed if a few simple requirements are met. In sowing use only loose, sterilized material—night temperature 60°. The seed is very fine and no soil covering should be used. After seedlings are well up 50° will suit them nicely. When large enough to handle, they should go into small Jiffy-Pots or bands—later into 4- or 5-inch pots for finishing. A regular insect control program is essential (aphis will wreck them in no time). We spray regularly with Parathion. From late February on they'll need some shade. Water only when dry; "wet feet" will cause yellowing of foliage.

- Extra Early Tigered. Solid heads of medium large flowers on dwarf plants; good color range. It blooms nearly a month before other varieties, costs less to grow. Ball Orig. Seed.

  Tr. pkt., \$2.00; ½28 oz., \$4.00; ½4 oz., \$7.20; ½32 oz., \$13.00.
- Grandiflora Dwarf Mixture. Extra large (2.2½ in.) flowers in unusual and striking colors are carried on fairly dwarf plants.

  Tr. pkt., \$1.25; ½4 oz., \$2.75; ½3 oz., \$5.00.
- Hybrid Mixture. (F. Hybrid). Brilliant reds and rich yellows.
   ½ tr. pkt., \$1.75; tr. pkt., \$3.00.

Rugosa Mixture. Large heads of quite small flowers in a brilliant color mixture. Tr. pkt., \$1.25.

Triumph Strain. Medium large flowers; mostly bright reds and yellows. Tr. pkt., \$1.25; ½4 oz., \$2.75; ½32 oz., \$5.00.



#### • BALL MULTIFLORA NANA MIXTURE

Large heads of medium sized flowers in brilliant reds, yellows and intermediate shades. The dwarf plants are wiry in growth with small, durable leaves which make for ease in handling and shipping. Ball Orig. Seed. Tr. pkt., \$2.00; ½2 oz., \$4.00; ½4 oz., \$7.20; ½2 oz., \$13.00.



#### **BALL RED BOOK**

Cultural information on over 130 greenhouse crops, together with articles on greenhouse management and merchandising.

BALL RED BOOK, Ninth Edition. Price, \$2.00.



#### CALENDULA

ANNUAL (C. officinalis)

3000 S. 2-3 weeks 65-75°

#### GREENHOUSE VARIETIES

Ball Calendulas were originated and developed by Geo. J. Ball as his first contribution to the long list of "Flower Seeds for Florists" which our firm has introduced to the florist trade in the past 50 years. Constant selection and breeding keep the strains in top shape. Ball Orig. Seed.

This long-stemmed class will flower freely during the spring months from a January sowing.

- Ball Improved Long Orange. Bright orange with light eye. Ball Masterpiece. Deep glowing orange with dark eye. Ball Lemon Queen. Lemon-yellow with dark brown eye.
- Ball Gold. Deep golden yellow with light eye. Prices above 4, each: Tr. pkt., 50c; 1/4 oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$9.00.

Ball Formula Mixture. Carefully made up of our named varieties with fully half orange.

Ball Art Shades Mixture. Contains many original and unusual shades and interesting bicolors.

Prices above 2, each: Tr. pkt., 40c; 1/4 oz., 80c; 1 oz., \$2.40; 4 ozs., \$7.20.

#### BEDDING VARIETIES

Showy for bedding where summer heat is not excessive.

#### PACIFIC BEAUTIES

These improved Calendulas are more resistant to summer heat than the ordinary bedding class. Originator's seed.

Apricot Beauty. Attractive two-toned rich apricot.

Cream Beauty. Creamy white shading to soft yellow.

- Lemon Beauty. A pure lemon-yellow; wide petals.
- Persimmon Beauty. Brilliant, true persimmon-orange.
- Pacific Beauty Mixture. A blend of the above four. Prices above 5, each: Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$2.00.

Lemon Queen. Light lemon-yellow.

Orange King. Deep orange with dark eye.

Ball Bedding Mixture. Well proportioned dwarf mixture.

Prices above 3, each: tr. pkt., 35c; 1/4 oz., 50c; 1 oz., \$1.50.

#### CALLIOPSIS

ANNUAL (Coreopsis tinctoria) 90,000 S. 2-4 weeks 65-75° Fairly dwarf and very free flowering bedding plants. This is a showy item that we feel every bedding plant grower should try.

Dwarf Mixture. 6-8 in. Attractive, dwarf, compact mixture of red and yellow shades. Tr. pkt., 35c; ¼ oz., 60c; 1 oz., \$1.80.

#### CAMPANULA (Bell Flower)

ANNUAL (C. species) 50.000 S. 2-3 weeks 65-75°

Annual Canterbury Bells Mixture. 2 ft. An annual form of the well known perennial, flowering 6 months from sowing. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

S. See below 2-3 weeks 65-75° PERENNIAL (C. species) CARPATICA. 350,000 S. 12 in. Wide, upright, cup-shaped flowers are borne on slender, erect stems. Plants are leafy, compact

Cullinmore Mixture. Contains many new colors in this dwarf class. Tr. pkt., 60c; ½ oz., \$1.50; ¼ oz., \$2.80.

#### ROCK GARDEN BLEND =

Desirable, low-growing kinds in a wide range of Campanula colors. Tr. pkt., 75c.

#### PERENNIAL CAMPANULA, Continued

MEDIUM CALYCANTHEMA (Cup-and-Saucer Type). 120,000 S. 3 ft. Biennial. Both this and the following (Medium double) are easily forced for spring greenhouse cut flowers.

White Dark Blue Light Blue Rose Prices above 5, each: tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

MEDIUM DOUBLE (Canterbury Bells), 102,000 S. Formula Mixture. Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.40.

PERSICIFOLIA. 340,000 S. 2½ ft. Perennial. 1 inch, bell-shaped flowers on stiffly erect stems. 15-inch spikes.

Telham Beauty. Large bells of China blue. Tr. pkt., 40c; ½ oz., \$1.00; ½ oz., \$1.85.

#### CANDYTUFT

ANNUAL (Iberis coronaria) HYACINTH-FLOWERED.

9500 S. 1-3 weeks 65-75°

#### BALL GIANT WHITE<sup>®</sup>

This is an improved greenhouse-grown premium quality cut flower strain. Earlier flowering and produces larger heads than ordinary strains with their higher percentage of small-flowered culls. Sow Oct. to Jan. for Feb. to May cutting. Ball Orig. Seed. Tr. pkt., 65c; ½ oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$18.00.

● Long-Stemmed White (New-A Ball Origination). Large trusses of big florets are borne on exceptionally long stems. About a week later than Ball Giant White but considerably longer

Tr. pkt., 75c; 1/4 oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$18.00.

Giant White, Regular. European grown seed. Tr. pkt., 25c; ½ oz., 50c; 1 oz., 90c; 4 ozs., \$3.00; 1 lb.,

\$10.00.

• Ruffled White. Ruffled petals add interest to this excellent cutflower strain. Tr. pkt., 50c; ½ oz., \$1.40; 1 oz., \$2.50.

UMBELLATA. A popular spring greenhouse cut flower. Sow in January; plant out 8-10 in. Is also widely used as a winter outdoor crop in Florida and southern Texas.

Flesh-Pink Carmine Rose-Cardinal White

Lavender (Lilac) Formula Mixture

Prices above 6, each: Tr. pkt., 30c; 1 oz., 90c; 4 ozs., \$3.00.

#### FAIRY MIXTURE

Extra dwarf (8 in.) growth, producing perfectly mounded plants in white, pink, lavender and crimson. Uniform in growth and very early. Fine for "pak" or flat sales. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

Perennial Candytuft. See lberis, page 27.

#### CANNA

8 weeks 65-75° ANNUAL (C. generalis) 100 S. Giant Mixture. Select your own new varieties from this formula mixture. If sown in January, seedlings will usually bloom the first summer, and selected plants may be propagated from tubers. Soak seed before sowing over good bottom heat. 1 oz. (about 100 seeds), \$1.50; 4 ozs., \$5.00.

#### CARNATION

ANNUAL (Dianthus carvophyllus) 14,000 S. 2-3 weeks 65-75° From an early sowing planted outdoors, preferably under cloth protection, these strains will produce a nice crop of summer Carnations for cutting. Some supporting necessary. Also a garden favorite in cool climates.

• Giant Malmaison, J. M. Bridgeford. Of sturdy, upright habit. If well grown, supported and disbudded, flowers comparable to to those produced in the greenhouse can be had outside where summers are moderate. Many colors are represented in this superior mixture. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

# Gro. g. Ball

#### CARNATIONS, Continued

Marguerite Double Mixture. 15-20 in. Ours is a reselected strain of this very free flowering summer Carnation. An old favorite. Tr. pkt., 25c; ¼ oz., 65c; 1 oz., \$2.25.

CHABAUD'S GIANT IMPROVED STRAIN. The preferred strain for outdoor bedding use.

Ocardinal-Red (Sparkler)
Deep Rose (Rose Queen)
Deep Salmon (Aurora)

Flesh-Pink (Reine Rose)
White (Jeanne Dionis)
Yellow (Marie Chabaud)

Prices above 6, each: Tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$3.75.



#### FORMULA MIXTURE

This fine formula mixture includes all Carnation colors. The preferred strain for bedding.

Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

ENFANT DE NICE. A fine standard strain.

Red Salmon White Yellow Formula Mixture Prices above 5, each: Tr. pkt., 50c; ½ oz., \$2.25.

#### PERENNIAL

(Dianthus caryophyllus) 14,000 S. 2-3 weeks 65-75° GRENADIN (Hardy Carnation). 20 in. Good for cutting.

King of the Blacks. Darkest red.

Golden Sun • Pink • Red White • Mixture Prices above 6, each: Tr. pkt., 60c; ¼ oz., \$2.00; 1 oz., \$6.50. Castor Bean. See Ricinus, page 50.

#### **CATANANCHE** (Cupid's-Dart)

ANNUAL

16,000 S. 2-4 weeks 65-75°

Coerulea. 2 ft. Nice everlasting with light lavender-blue Centaurea-like flowers produced freely first year from seed. Tr. pkt., 25c; ¼ oz., 75c; 1 oz., \$2.25.

#### **CENTAUREA**

ANNUAL (C. species)

7000 S. 2-4 weeks 65-75°

CYANUS (Bachelor Button or Cornflower). Attractive and useful for spring greenhouse cutting from a December or January sowing, and widely flowered outdoors in summer. All of the following are the finest reselected florist strains.

• Blue Boy. Bright blue.

Black Boy. Deep maroon.

Red Boy. Deep carmine-rose.

• Pinkie (Rosie). Improved rose-pink.

• Snowman. Fine clear white.

Formula Mixture.

Prices above 6, each:

Tr. pkt., 20c; 1 oz., 65c; 4 ozs., \$2.20; 1 lb., \$6.50.

#### **DWARF CENTAUREAS**

Dwarf and bushy. Ideal for borders and general bedding. Height 10-12 in. Also make a satisfactory pot plant.

• Jubilee Gem. Bright cornflower-blue.

Gem Mixture. Red, pink, blue, maroon and white.

Prices above 2, each: Tr. pkt., 35c; \( \frac{1}{4} \) oz., 60c; 1 oz., \$1.80.

IMPERIALIS (Sweet Sultan). Very showy thistle-like flowers; larger than the Cyanus type. Height  $2\frac{1}{2}$  ft.

Suaveolens (Yellow Sweet Sultan). Bright yellow. 20 in. Forces well indoors,

Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.20.

DUSTY MILLERS. The silvery white-leaved kinds for border work. Cineraria Maritima Diamond also belongs in this group.

Candidissima. 6 in. The slow growing kind that must be started early. Tr. pkt., 60c; ¼ oz., \$1.25; 1 oz., \$3.75.

**Gymnocarpa.** 2 ft. Strong growing, fern-leaved. Tr. pkt., **35c**; ½ oz., **60c**; 1 oz., **\$1.80**.

PERENNIAL (C. montana) 1600 S. 3-4 weeks 65-75° Montana. 2 ft. Large cornflower-blue flowers. Tr. pkt., 25c; ½ oz., 50c; 1 oz., \$1.50.

#### **CERASTIUM**

PERENNIAL (C. tomentosum) 42,000 S. 2-4 weeks 65-75°

Tomentosum. 10 to 12 in. An excellent spreading garden perennial with silvery foliage and small white flowers. Tr. pkt., 30c; ½ oz., 60c; 1 oz., \$1.80.

#### CHEIRANTHUS (Siberian Wallflower)

PERENNIAL (C. cheiri)

19,000 S. 2-3 weeks 65-75°

Does best in cool climates.

• Golden Bedder. 18 in. Large, deep golden yellow. Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.20.

Orange Queen. 18 in. Free flowering brilliant orange. Tr. pkt., 25c; 1 oz., 50c; 4 ozs., \$1.50.

Annual Wallflower. See page 59.

#### CHERRY, CHRISTMAS

ANNUAL

(Solanum pseudo-capsicum) 12,000 S. 3-4 weeks 65-75° Sow in February, summer plants outdoors; lift and pot in September for Christmas pot plants. Or to save labor carry in pots in frames during summer.

• Ball Christmas Cherry (Hlavacek's Masterpiece). A uniform, bushy strain. Large, round, red fruit is very freely produced. Ball Orig. Seed. Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$3.75.

Patterson Christmas Cherry. More dwarf and compact than Ball Christmas Cherry. Well suited for smaller sized pots. Tr. pkt., 75c; ¼ oz., \$1.50; 1 oz., \$4.75.

See also Pepper, Christmas, page 34, and Love Apple, page 30.

#### CHRYSANTHEMUM

ANNUAL (C. species) 9000 S. 2-5 weeks 65-75° A nice spring greenhouse "catch crop" for cutting. Also quite showy for bedding.

 Rainbow Mixture (Carinatum). 2 ft. A brilliant mixture of annual Chrysanthemums including many entirely new shades and color combinations.

Tr. pkt., 25c; ¼ oz., 75c; 1 oz., \$2.25.

FERNNIAL (C. species) 70,000 S. 24 weeks 65-75° Glory Mixture. 1½ to 2 ft. Our finest mixture of hardy Chrysanthemums with an exceedingly wide range of brilliant colors. Contains Korean and Arcticum Hybrids, Azaleamums, Indicums, and Morifoliums. Tr. pkt., \$1.00; ½ oz., \$2.50; ½ oz., \$4.50.

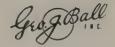
Korean Mixture.  $1\frac{1}{2}$  to 2 ft. Single and semi-double types in a good color range. Some bloom rather late for localities with early frost dates. Tr. pkt., \$1.00;  $\frac{1}{1}$ 8 oz., \$2.50;  $\frac{1}{4}$ 4 oz., \$4.50.

#### MIKADO=

(New.) A mixture of greenhouse, cut flower varieties in a wide color range. Large Mums, Pompons, Anemones, and Spider types are included in this novel assortment. Seed sown in March will produce flowers the following fall and early winter. Tr. pkt. (250







## Celosia

ANNUAL (C. argentea cristata) 28,000 S. 1-2 weeks 65-75°

One of the finest, most uniform and colorful items for annual plant sales. Celosias will come into bloom prematurely with small heads if growth is checked. Therefore, for spring plant sales do not sow earlier than 6 weeks before planting-out time, and grow warm -at least 60° nights.

CRISTATA. The popular Cockscomb type. The taller varieties provide good cut flowers in either the fresh or dried state, while the dwarf kinds make nice pot plants in summer. Closer spacing decreases size of heads, making them more suitable for cutting.

Gladiator. 8 in. Golden yellow combs on dwarf plants with light green leaves. Improved strain. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz.,



CELOSIA, FOREST FIRE AND GOLDEN FEATHER

#### ● KARDINAL =

\$4.50.

8 in. A fine uniform strain of red combs with green leaves. Immense blooms on extremely dwarf plants make Kardinal quite striking. Useful for pots, bedding, borders and combinations.

Tr. pkt., 50c; ½ oz., \$1.40; ¼ oz., \$2.50; 1 oz., \$7.50.

Gilbert's Gold Dust. Yellow, turning a deep gold. Gilbert's Rose Beauty. Ruffled, ball-shaped heads.

Gilbert's Maple Gold. Light to dark pink, tipped with gold. Prices above 3, each:

Originator's tr. pkt. (300 seeds), 50c; 5 pkts., \$2.25.

• Red and Gold. 2 ft. Large combs gaily marked wine-red and yellow-gold with bright green leaves. Tr. pkt., 50c; 1/8 oz., \$1.50; 1/2 oz., \$5.00.

Royal Velvet. 30 in. Crimson combs borne well above foliage. Tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

#### • TOREADOR =

(All America Selection). Large combs up to 12 inches across of lustrous, bright red are carried on plants 18-20 inches high. Stems are very stiff and sturdy with lux-

urious, bright green foliage. Ball Orig. Seed. Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00.

CELOSIA, TOREADOR



#### • FOREST FIRE

21/2 ft. Brilliant plumes of fiery orangescarlet contrast strikingly with the bronzy red foliage. Visitors at our trial grounds are impressed with its showiness and uni-

form habit. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

Empress (Dwarf). 12 in. Large crimson combs with deep reddish leaves. Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.40.

• Dwarf Mixture. 8 in. A choice mixture of all colors in this class with both light and dark foliage. A new, improved strain. Tr. pkt., 50c; ½ oz., \$1.40; ¼ oz., \$2.50; 1 oz., \$7.50.

Tall Mixture. 3½ ft. Mixture of all colors in the tall class. Tr. pkt., 35c; ¼ oz., 80c; 1 oz., \$2.40.

PLUMOSA. Plumed or feathery type, producing spire-like branches, mostly from base of plant. The dwarf varieties are widely used for bedding and as spring and summer pot plants, while the taller strains make useful cut flowers in late summer.

Golden Fleece. 4 ft. Large, dense golden yellow plumes on vigorous plants. Makes a good cut flower. Tr. pkt., 40c; ¼ oz., \$1.20; 1 oz., \$3.60.

Scarlet Plume. 4 ft. Bright crimson-scarlet. Very colorful for fall borders and cutting. Tr. pkt., 40c; ¼ oz., \$1.20; 1 oz., \$3.60.

#### DWARF FEATHER VARIETIES

These "feather" varieties are really outstanding as a bedding subject where a rather dwarf, strong color accent is wanted. Also used for combinations and pots. Our trials of Fiery Feather and Golden Feather draw much favorable comment each year.

- Fiery Feather. 12 in. Very attractive pyramid formation with fiery red spires.
- Golden Feather. 12 in. Same as above but golden yellow.
- Feather Mixture. A formula mixture of the above two varieties: % Fiery Feather, 1/8 Golden Feather.

  Prices above 3, each: Tr. pkt., 30c; 1/8 oz., 70c; 1/4 oz., \$1.30; 1 oz., \$4.25.
- Thompsoni magnifica. 2½ ft. Contains strikingly brilliant : reds and yellows with some copper and gold shades. This makes an excellent cut flower. Tr. pkt., 30c; ¼ oz., 60c; 1 oz., \$2.00.

Spicata. 5 ft. Long, slender silvery rose spikes for fresh cut flowers or for drying. Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

CINERARIA, CLARKIA, CLEOME and COBAEA. See page 18.

### COLEUS

#### BALL RAINBOW

Originator's Seed

ANNUAL (C. blumei)

100,000 S. 2-3 weeks 70-80°

Growers throughout the country are relying more heavily than ever on Ball Rainbow Mixed Coleus seed for their requirements of this fine foliage plant.

Originated over a decade ago by George J. Ball, our seed of this uniquely fine strain is grown in our West Chicago greenhouses under our careful, daily supervision.

#### SEVEN SEPARATE COLORS

We are now offering seven distinct separate colors originally selected out of the Rainbow Mixture. These strains come at least 90% true to color—the balance being entirely salable specimen plants. This offer therefore makes straight colors similar to named cutting varieties like Butterfly, Christmas Gem and Brilliancy available from seed. Cuttings from these seedlings root freely, of course. The plant habit is dwarf and base-branching, and satisfies all the requirements of this versatile shade-house plant subject. Ideal for combination boxes or pots and for budget 3-in. pot sales.

Coleus should have full sun in winter, light shade in spring greenhouse. As house plant it requires full sun. In garden it does well in complete or partial shade. Good 3-in. pots come in 3 months or less from seed at 65°, bedding Coleus in "paks" take about two months.

#### IMPORTANT!



Seed of all Ball greenhouse-grown Coleus varieties, including our Rainbow Mixture, is produced at West Chicago each year from carefully controlled parent lines. It is important that genuine Ball originator's seed be used if top quality is wanted. Other strains

are, of necessity, 2 generations removed from the original breeding stock, and often give unsatisfactory results.

- Candidum. A striking combination of brilliant green and soft ivory. Wonderfully showy for use in plant combinations, blending well with all other colors. 90% true to type. Ball Orig. Seed.
- Pastel Rainbow. Soft shades of light salmon-pink and pale green provide a wealth of spring-like freshness in this pleasing variety. 90% true to type. Ball Orig. Seed.
- Pink Rainbow. Medium sized leaves of rich coral-pink blending to salmon with small green border. Unusually attractive and 90% true to type. Ball Orig. Seed.
- Red Rainbow. A bright combination of deep mahogany-red and brilliant carmine-rose edged green. Bushy plants with medium sized leaves. 90% true to type. Ball Orig. Seed.
- Scarlet Rainbow. Brilliant scarlet-red with narrow green edge. The most colorful of all when plants are the size for combination use. Darkens somewhat as plants grow larger and older. 90% true to type. Ball Orig. Seed.
- Velvet Rainbow. Visitors at our greenhouses have frequently remarked about the wonderful brilliance of this blood-red variety with darker velvety overtones. 85-90% true to type. Ball

Price above 6, each: ½ tr. pkt., \$1.50; tr. pkt., \$2.50; 1/64 oz., \$3.30;  $\frac{1}{32}$  oz., \$6.00;  $\frac{1}{16}$  oz., \$11.00.

Golden Rainbow (New). A rich, golden chartreuse flecked with pale green. Makes a wonderful contrast with red leaved varieties. Ball Orig. Seed. ½ tr. pkt., \$1.50; tr. pkt., \$2.50. LIMIT.

COLLECTION: Tr. pkt. each of Pastel Rainbow, Velvet Rainbow, Scarlet Rainbow, Red Rainbow, Pink Rainbow, and Candidum. 6 tr. pkts. for \$13.50.



3-inch Coleus plants ready for combination use or bedding sales. Top to bottom: Golden Rainbow, Velvet Rainbow, Candidum. Scarlet Rainbow, and another lot of Candidum.

#### BALL RAINBOW MIXTURE

Developed over a decade ago by Geo. J Ball, through careful selection the Ball Rainbow Coleus Strain has no equal in the world today. We have trialed all im-

portant commercial strains—none match this strain for its high percentage (90%) of bright warm Coleus colors which even excel the brilliance and luster of many of the best known cutting propagated varieties. Rich reds, yellows, coppers, pinks, all abound in infinite varieties of tones and shades. Uniform habit with freely borne medium sized leaves. Ideal for combinations, shade planting, and wherever Coleus are useful. This seed is greenhouse-grown at West Chicago. Be sure that no seedlings are discarded to insure balanced mixture of colors. 1/2 tr. pkt., \$1.00; tr. pkt., \$1.75; 1/64 oz., \$2.75; 1/32 oz.,

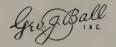
\$5.25; ½6 oz., \$9.50.

#### Other Varieties

Ball Copper Giant. Large leaves of copper-rose. 75% true to type. Ball Orig. Seed. Tr. pkt., \$1.25; 1/32 oz., \$2.50.

• Giant Exhibition Mixture. An extra large-leaved strain with exceptional brilliance of coloring. Tr. pkt., \$1.25; \(\frac{1}{32}\) oz., \$2.50; \(\frac{1}{16}\) oz., \$4.75.

Standard Mixture. This is a field-grown mixture. European grown reproduction of our Ball Rainbow Strain. Tr. pkt., 75c; 1/32 oz., \$1.80; 1/16 oz., \$3.25.



#### CINERARIA

150,000 S. 2-3 weeks 65-75° ANNUAL (Senecio cruentus) Cinerarias will make nice 3-inch plants in May for combination work, or budget sales, if sown Dec.-Jan. and kept growing right along. Sow from June on for Christmas and later.

- Cremer's Prize Strain (Our own reselected stock). Extra large heads of medium small flowers in widely varied color assortment; about half light-eyed. Small foliage. Tr. pkt., \$1.75;  $\frac{1}{64}$  oz., \$2.50;  $\frac{1}{32}$  oz., \$4.50;  $\frac{1}{16}$  oz., \$8.25.
- Dwarf Erfurt Mixture. Dense heads of medium sized flowers in a fine color balance, including copper, salmon, and maroon in addition to the usual Cineraria colors. Habit is compact and very uniform. Tr. pkt., \$1.50;  $\frac{1}{64}$  oz., \$2.50.

Dwarf Giant Exhibition Mixture. Extra large flowers on medium dwarf plants. For exhibition work. Tr. pkt., \$1.50; ½4 oz., \$2.75.

#### • FESTIVAL =

This is our own small-leaved strain requiring a minimum of bench space. Plants are bushy and compact with even heads of medium sized, mostly white-eyed flowers in a brilliant color range. We're sure this strain is unexcelled. Ball Orig. Seed.  $\frac{1}{2}$  tr. pkt., \$1.75; tr. pkt., \$3.00;  $\frac{1}{64}$  oz., \$4.50;  $\frac{1}{32}$  oz., \$7.50;  $\frac{1}{16}$  oz., \$13.00.

Grandiflora Dwarf Mixture. 112,000 S. Large flowers in rich colors with contrasting large white eyes. Dwarf growth. Tr. pkt., \$1.00;  $\frac{1}{64}$  oz., \$2.00;  $\frac{1}{32}$  oz., \$3.75.

H. & S. Super Giants Superb Mixture. Similar to Dwarf Giant Exhibition Mixture. A fine strain in a complete color range. Originator's seed.

Tr. pkt., \$1.50;  $\frac{1}{64}$  oz., \$2.50;  $\frac{1}{32}$  oz., \$4.50;  $\frac{1}{16}$  oz., \$8.50.

- Multiflora Nana, Gold Center. 200,000 S. Attractive, medium small, solid colored flowers with yellow anthers. Good shipper. Tr. pkt., \$1.25;  $\frac{1}{64}$  oz., \$2.25;  $\frac{1}{62}$  oz., \$4.00.
- No. 1 Mixture. Consists of Cremer's Prize Strain and Siter's Rainbow Strain in equal proportions. Tr. pkt., \$1.50;  $\frac{1}{64}$  oz., \$2.50;  $\frac{1}{32}$  oz., \$4.75.
- No. 2 Mixture. Contains ½ Cremer's Prize Strain and ¼ each Siter's Rainbow Strain and Multiflora Nana, Gold Center Strain. Tr. pkt., \$1.50;  $\frac{1}{64}$  oz., \$2.50;  $\frac{1}{32}$  oz., \$4.75.
- Siter's Rainbow Strain. 112,000 S. Immense heads of medium large, mostly white-eyed flowers. Tr. pkt., \$2.00;  $\frac{1}{64}$  oz., \$2.75;  $\frac{1}{32}$  oz., \$5.00;  $\frac{1}{16}$  oz., \$9.00.

Stellata Mixture (Star type). Small, free flowering strains. 24 to 30 in. tall. Tr. pkt., \$1.00;  $\frac{1}{32}$  oz., \$2.50.

"Vivid" Formula Mixture. A complete mixture of solid colors (without "eyes"). Dwarf with well rounded heads and fairly small leaves. Blooms about a month later than other strains Tr. pkt. (1000 seeds), \$1.75;  $\frac{1}{64}$  oz., \$2.75;  $\frac{1}{32}$  oz., \$5.00. Also available in the following separate colors at the same price:

White, Bright Red, Brick-Red (Matador), Light Blue, Mid-Blue, Pink Shades and Salmon.

DUSTY MILLER, 85,000 S.

• Maritima Diamond. 10 in. An improved strain of our finest Dusty Miller. Compact, even growth and very white foliage. Tr. pkt., 20c; ¼ oz., 50c; 1 oz., \$1.50.

#### CLARKIA

ANNUAL (C. elegans) 90,000 S. 1-2 weeks 65-75° Popular Double for spring cut flower use. Sow in January and grow in flats, disbudding to 2 or 3 spikes for long-stemmed flowers. Don't feed and keep fairly dry after plants are about a foot high to prevent over-soft, lanky growth.

Albatross (White)

Salmon Queen

Prices above 3, each: tr. pkt., 25c; ¼ oz., 75c; 1 oz., \$2.25.

CLEOME, PINK QUEEN This "Sweet Sixteen" variety never fails to attract attention in our trials. Try some for bedding plant sales this year.

### **CLEOME** (Spider Plant)

ANNUAL (C. spinosa) 12,500 S. 1-2 weeks 65-75° Good bedding plant for backgrounds. Starts slowly but grows fast in garden.

Golden Sparkler (C. lutea). 5500 S. Bright golden orange. An unusual Cleome color. Germinate cool or sow directly outside. Tr. pkt., 45c;  $\frac{1}{4}$  oz., 1.25; 1 oz., 3.75.

Helen Campbell. A sport of Pink Queen, with large heads of glistening pure white flowers. Tr. pkt., 50c; 1/4 oz., 90c; 1 oz., \$2.70.



#### PINK QUEEN

The newly opened flowers of the large (6 to 7 in.) heads are a luminous rosy pink, later changing to pure white for a pleasing bicolor effect. Makes a gorgeous

hedge-like row about 4 ft. tall and 3 to 4 ft. across. Tr. pkt., 35c; ¼ oz., 55c; 1 oz., \$1.90.

Purple Queen (New). 5 ft. Similar to Pink Queen, but with large heads of lilac-purple flowers. Tr. pkt., 50c; 1/4 oz., 90c; 1 oz., \$2.70.

#### **COBAEA** (Cup-and-Saucer Vine)

ANNUAL (C. scandens) 375 S. 2-3 weeks 65-75° A popular, strong growing, annual climber with 2 in. bell-shaped flowers. Reaches 20 ft.

Purple. Tr. pkt., 30c; \(\frac{1}{4}\) oz., 60c; 1 oz., \$1.80.

## Grog Ball

#### CONVOLVULUS

ANNUAL (C. tricolor)

1400 S. 10 days 65°

Royal Marine. This dwarf Morning Glory is almost carpet-like in growth with a profusion of rich, royal blue flowers. Fine for rock gardens or borders.

Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### **COREOPSIS**

PERENNIAL (C. grandiflora) 11,000 S. 2-3 weeks 65-75° The long, graceful stems and rich, golden yellow color give this plant real value for cutting. We find it best treated as a biennial.

• Sunburst. 2 ft. A fine semi-double strain with 2-inch, golden yellow flowers. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.10.

#### CORN, ORNAMENTAL

ANNUAL (Zea Mays)

90 S. 1 week 65-75°

Rainbow (Calico or Indian Squaw). Kernels of various colors make attractive ears for fall decoration.

1 oz., 20c; 4 ozs., 50c; 1 lb., \$1.50.

Strawberry. 590 S. Tiny 2-in. ears of rich, shiny mahogany contrast with the straw-colored husks when folded back. 1 oz., 40c; 4 ozs., \$1.40; 1 lb., \$4.00.

**Striped.** 6-8 ft. Here is an ornamental-leaved Corn, the foliage of which is quite attractive with its contrasting clear yellow stripes on dark green. Try the leaves in floral arrangements. 1 oz., 40c; 4 ozs., \$1.40; 1 lb., \$4.00.

#### COSMOS

ANNUAL (C. bipinnatus) 5000 S. 24 weeks 65-75° SENSATION. 3 ft. The most satisfactory class of Cosmos to grow for cut flower purposes. Extra large flowers and extreme earliness make them suitable for growing outdoors even in northern climates.

- Pinkie. Clear orchid-pink.
- Purity. Extra large flowered pure white.
- Mixture of above and other shades.

Radiance. Deep rose petals with large, rich crimson eye. A striking color combination.

Dazzler. Bright crimson-red.

Prices above 5, each: tr. pkt., 30c; 1/4 oz., 50c; 1 oz., \$1.50.

#### EARLY SINGLE MAMMOTH FLOWERED

Queen Mixture. All colors in this large flowered class. Tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.50.

#### EXTRA EARLY DOUBLE CRESTED

Produces around 60% large crested flowers.

Mixture. Tr. pkt., 55c; 1/4 oz., \$1.60; 1 oz., \$4.80.

HYBRIDA KLONDYKE. 2800 S.

• Fiesta. Yellow, striped orange. Sturdy plants, good for bedding. Tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.50.

#### COTTON

ANNUAL (Gossypium hirsutum) 270 S. 12 days 70° A dwarf strain with bright pink buds and creamy blossoms. Sow indoors and plant out after frost. Seed cannot be shipped into California. Tr. pkt., 35c; 1 oz., \$1.50.

#### • CROSSANDRA

For Potted Plants

#### ANNUAL

(C. infundibuliformis) 4000 S. 7-12 weeks 75-80° An attractive and valuable pot plant with glossy, Gardenialike foliage, and flower spikes of overlapping clear salmon florets. Can be sown at any time but most easily started in early spring, and flowers 7 to 8 months in a warm house and in rich, well drained soil. Minimum of 65° for best growth. 50 seeds, \$2.00; 200 seeds, \$6.00.

#### CUPHEA

**ANNUAL** (C. Llavea miniata) 7000 S. 2-3 weeks 65-75° Very attractive and easily grown bedding plants.

• Firefly. Dense, compact plants reaching a height of 12 in. with freely produced, small, bright scarlet flowers. Also makes an attractive spring pot plant.

Tr. pkt., 40c; % oz., 75c; ¼ oz., \$1.35; 1 oz., \$4.00.

#### **CYCLAMEN**

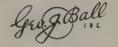
ANNUAL (C. indicum giganteum) 2500 S. 3-4 weeks 65-75° We conduct regular and extensive flowering trials of Cyclamen strains from the world's leading seed producers, in addition to examining these strains as they are grown in Europe and America. Our conclusion is that no one Cyclamen seed specialist excels in all varieties. As a result, the Ball strains include only those in which each grower (according to our observation—not the grower's claim) excels.

- No. 1 Dark Blood-Red.
- No. 2 Bright Red.
- No. 3 Pure Rose (Rose of Aalsmeer). Medium salmon-pink.
  - No. 4 Soft Rose with Carmine Eye. Lavender-rose; wine-red
  - No. 5 White with Carmine Eye.
- No. 6 Pure White. Large flowers.
- No. 7 Bonfire. Brilliant scarlet-salmon.
- No. 8 Salmon-Scarlet (America-Imp.)
- No. 10 Glory of Wandsbek (Perle of Zehlendorf). Bright deep salmon.
- No. 11 Rose of Zehlendorf. Light salmon.
  - No. 12 Orange Beauty. Orange-vermilion.
  - No. 13 Roccoo Mixture. Fringed flowers; unusual shapes and markings.
  - No. 16 Saffron-Red, Silver Edged.
- No. 17 Striped Mixture. Unusually showy and attractive.
  - No. 18 Mozart. Deep pink.
  - No. 19 Lavender. Bright fuchsia-orchid.
- No. 21 Pink Pearl. Salmon-pink.
- No. 22 Baardse Wonder. Salmon with white border.
- No. 26 Victoria. Fringed white, tipped red.
- No. 50 Ruffled Lavender.
- No. 51 Ruffled Salmon.
- No. 52 Ruffled White.
- No. 53 Ruffled Dark Red.
- No. 60 Ruffled Mixture.

Prices above 24, each: 100 seeds, \$2.50; 1000 seeds, \$20.00.

• No. 30 Mixture of above colors: 100 seeds, \$2.00; 1000 seeds, \$15.00.

DISCOUNTS—In addition to our regular cash discounts, the following special discounts are allowed on the above Cyclamen seed: 250 of a variety at 1000 rate; 10,000 to 25,000 seeds, any assortment, 5%; over 25,000 seeds, 10%.



#### CYCLAMEN, Continued

VOGT'S DOUBLE-FLOWERED STRAIN

Admiration. Salmon-rose with shaded eye.

Mixture.

Prices above 2, each: 100 seeds, \$3.75; 250 seeds, \$7.75; 500 seeds, \$14.50.

PERENNIAL (C. neapolitanum) 2500 S. 3-4 weeks 65-75°

#### NEAPOLITANUM MIXTURE

Shades of rose and white flowers about ½ the size of annual Cyclamen. Free flowering on 8- to 10-inch stems, in August and September. For best results sow early in fall and carry seedlings through the first winter under glass, transplanting out to partially shaded area in spring. 100 seeds, \$1.00; 500 seeds, \$3.00.

#### CYNOGLOSSUM

ANNUAL (C. amabile)

5000 S. 2-3 weeks 65-75°

AMABILE. Chinese Forget-Me-Not.

• Firmament. 18 in. Fine bushy, compact plants with freely produced small flowers of the most intense clear blue. An excellent bedding plant that stands hot, dry weather well. Tr. pkt., 25c; ¼ oz., 45c; 1 oz., \$1.35.

Blue Bird. 2 ft. An improved, upright-growing type; rich bright blue. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.15.

#### DAHLIA

ANNUAL (D. pinnata)

2800 S. 2-3 weeks 65-75°

Because of the wide variation in colors and types, seedling Dahlias are interesting to grow and tubers may be saved from the choicest specimens. The dwarf types are especially nice for outdoor bedding while the Unwin strain also makes a fine pot plant. All flower the

first season from an early sowing. Should be sown several weeks ahead of other annuals for maximum bloom the first year.

**Cactus Mixture.** 3 to 4 ft. Large, double and semi-double Cactus type flowers in many colors.

Tr. pkt., \$1.00; 1/4 oz., \$2.50; 1 oz., \$7.50.

Coltness Mixture. Dwarf and free flowering single mixture. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

Fall Festival (Zulu). 2½ ft. single and double flowers in shades of red with some apricot-yellow and purple. Foliage is an unusually attractive bronzy red. Tr. pkt., 30c; ¼ oz., 80c; 1 oz., \$2.50.

Giant-Flowered Mixture. A tall-growing mixture producing 50% giant double flowers of the very best types and colorings. Must be sown early to insure blooms before frost. Tr. pkt., 60c; ½ oz., \$1.85; ¼ oz., \$3.50; 1 oz., \$10.00.

Pompon Mixture. 3 ft. Medium to small double and semi-double flowers in a wide color range. Tr. pkt., \$1.00; ¼ oz., \$2.50; 1 oz., \$7.50.

#### ● Unwin's Dwarf Mixture

The compact, dwarf plants of our special strain (pictured at right) produce a profusion

of  $2\frac{1}{2}$  to 3-inch double and semi-double blooms in a lavish assortment of exquisite colors. Seed sown during January will produce salable 3- to 4-inch flowering pot plants in May. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 80c; 1 oz., \$2.50; 4 ozs., \$7.50.

#### DAISY

ANNUAL

S. See below 14 days

Dahlborg Daisy (Thymophylla tenuiloba). 150,000 S. 6 in. An unusually attractive, compact edging plant with airy, lace-like leaves and a profusion of small yellow flowers.

Tr. pkt., 60c; 1/8 oz., \$1.40.

Tahoka Daisy (Machaeranthera tanacetifolia). 29,500 S. 2 ft. Single, Daisy-like flowers of lavender-blue with deep yellow centers. Tr. pkt., 30c; ½ oz., 75c; ½ oz., \$1.25; 1 oz., \$3.75.

PERENNIAL

(Unrysanthemum maximum)

21,000 S. 12 days 65°

SHASTA DAISY. For best results, sow in February for cut flowers the second summer. Succession crops should be sown each year. Specimen plants may be propagated by divisions.

#### • G. MARCONI=

18,000 S. The largest flowered and finest double Shasta Daisy strain from seed. Long-stemmed. Tr. pkt., 55c; ½ oz., \$1.65; ½ oz., \$3.00; 1 oz., \$12.00.

**Double Fringed** (Diener's). 24,000 S. A reselected strain producing about 50% double types that should be propagated by division.

Tr. pkt., 55c;  $\frac{1}{8}$  oz., \$1.65;  $\frac{1}{4}$  oz., \$3.00; 1 oz., \$12.00.

Mayfield Giant. Quite large-flowered; end of June.

• Alaska. The standard Shasta Daisy. July.

Prices above 2, each: tr. pkt., 25c; ½ oz., 50c; 1 oz., \$1.50.

Blue Daisy. See Agathea, page 4. English Daisy. See Bellis, page 7. Painted Daisy. See Pyrethrum, page 50.

#### **DATURA**

See page 22.



# Delphinium

PERENNIAL

(D. elatum)

10.000 S. 3-4 weeks 55-65°

If Delphinium seed is sown in January or early February, transplanted in the greenhouse and planted out in early spring, a good cut can be had the same summer with excellent production the following season.

### GIANT PACIFIC STRAINS Court Series

- Black Knight. Deep velvety blue. The darkest of all.
- Blue Bird. The clearest of medium blues; white bees.
   Blue Jay. A brilliant true medium blue with dark bee.
   Cameliard. Lavender and rose with white bee.
- Galahad. The finest clear white Delphinium.
- Guinevere. Excellent, light pinkish lavender; white bee.
- King Arthur. Royal violet with white bee. Exceptional size.
- Summer Skies. Light blue with contrasting white bee.
- 6 Best Mixture. Formula mixture of the "6 Best" varieties.

  Round Table. Contains all above plus many new colors.

#### Prices of above:

Originator's Seed (Vetterle and Reinelt). An excellent strain of the Giant Pacifics kept uniform and vigorous by the originator. ½ tr. pkt., \$1.25; tr. pkt., \$2.00; ½ oz., \$3.00; ¼ oz., \$5.50; 1 oz., \$20.00.

Regular Seed. A satisfactory strain one generation removed from originator's seed. Grown by a reliable seed producer. Tr. pkt., \$1.50; ½ oz., \$2.50; ¼ oz., \$4.50; 1 oz., \$15.50.

#### ASTOLAT =

Pale blush shades with several darker tones including a few raspberry-rose. Dark bees.  $\frac{1}{2}$  tr. pkt., \$1.25; tr. pkt., \$2.00;  $\frac{1}{8}$  oz., \$3.00;  $\frac{1}{4}$  oz., \$5.50; 1 oz., \$20.00.

#### **OUR "6 BEST" GIANT PACIFICS**

Galahad Blue Bird Summer Skies King Arthur Black Knight Guinevere

Originator's Seed 1 tr

Originator's Seed. 1 tr. pkt. each of 6 Best, \$10.80. Regular Seed. 1 tr. pkt. each of 6 Best, \$8.00.

#### Giant Pacific Regular Strain

Clear White. A fine clear white, large flowered.

Blue Shades. Mixture of light, medium and dark blue.

Lavender Pastel Shades. Lavender combinations with dark bees.

Mixture. All colors in this fine type.

**Prices** above 4, each; tr. pkt., \$1.25;  $\frac{1}{1}$ s oz., \$2.25;  $\frac{1}{4}$  oz., \$4.00; 1 oz., \$13.50.

#### OTHER VARIETIES

(All California-grown seed)

- Belladonna Imp. (Cliveden Beauty). A carefully reselected strain of this popular light blue.

  Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.
- Bellamosum Improved. A reselected strain of this standard deep blue.

  Tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.



GIANT PACIFIC DELPHINIUM
Cameliard, Summer Skies, Black Knight, and Guinevere

Lamartine. Deep, bright marine-blue with white eye. Tr. pkt., 55c; ¼ oz., \$1.50; 1 oz., \$5.00.

Blackmore and Langdon Strain. Shades of blue with contrasting bees. A fine free-flowering mixture. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

• Sapphire. Large flowered bright blue with small golden bee. Petals have a brilliant, glossy sheen. Slightly lighter than Bellamosum. Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00.

Wrexham or Hollyhock Strain. Extra large, tapering spikes. Tr. pkt., 55c;  $\frac{1}{4}$  oz., \$1.75; 1 oz., \$6.00.

Gold Medal Mixture. Tr. pkt., 35c; ½ oz., \$1.00; 1 oz., \$3.00.

Cardinale. 25,000 S. Bright scarlet. Tr. pkt., 40c; ½ oz., \$1.20; 1 oz., \$3.60.

ANNUAL (D. grandiflorum) 20,000 S. 2-3 weeks 60-70

DELPHINIUM CHINENSIS. Sow several weeks before most bedding plants for good bloom. Often winters over.

- Blue Mirror. 2 ft. Bright navy-blue flowers without spurs. Tr. pkt., 55c; ½ oz., \$1.25; 1 oz., \$3.75.
- Cambridge Blue. The standard Belladonna blue variety. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

Mixture. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.



#### DATURA

ANNUAL (D. species)

2-3 weeks 65-75°

White Tower (D. suaveolens). 870 S. 5 ft. Huge, fragrant, snowy trumpet-like flowers up to a foot in length. Very spectacular when well grown. Germinates slowly and needs heat. Tr. pkt., 75c; 1/4 oz., \$2.00; 1 oz., \$6.00.

Wrighti (Angel's Trumpet). 2500 S. 3 ft. Large, white, tinted orchid flowers. Tr. pkt., 30c; 1/4 oz., 65c; 1 oz., \$2.00.

#### DIANTHUS

25,000 S. 2-3 weeks 65-75° ANNUAL (D. chinensis) These wonderfully showy and free flowering bedding plants deserve to be better known and more widely grown. Why not try some this spring?

• Sweet Wivelsfield Single Mixture. 12 in. Probably the most popular of the annual Dianthus. Free flowering and brilliantly colored. Tr. pkt., 15c; ¼ oz., 35c; 1 oz., \$1.00.

Sweet Wivelsfield Double Mixture. Same as above but most flowers either semi-double or double. Tr. pkt., 30c; ¼ oz., 70c; 1 oz., \$2.25.

Westwood Beauty (D. Heddensis). Pleasing 2-inch, single flowers in shades of red on long stems. Somewhat more resistant to heat than ordinary Dianthus. Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00.

HEDDEWIGI (Double pinks), 10 in.

• Double Gaiety. Brilliant shades in a full range of colors, including bright salmon and scarlet, Tr. pkt., 35c; 1/4 oz., 75c; 1 oz., \$2.50.

Imperator Mixture of all colors in this double class. Tr. pkt., 20c; ¼ oz., 40c; 1 oz., \$1.35.

Wee Willie (New). 3 in. An extra dwarf Dianthus in shades of red. Must be planted close together for good effect. Makes a fine display in flats or for combination use, blooming in 6 to 8 weeks from sowing. Tr. pkt., 55c; ½ oz., \$1.65; ½ oz., \$3.00.

PERENNIAL (D. species) 28,000 S. 2-4 weeks 65-75° Easily grown from seed with flowers from May to July the second season from sowing.

Allwoodi Alpinus Mixture. 8 to 10 in. 1½-inch single flowers in shades of pink. Early June.

Tr. pkt., 35c; 1/8 oz., \$1.00; 1/4 oz., \$1.75.

#### DELTOIDES ERECTA

6 in. May-June flowering. A dwarf rose "Maiden Pink." A fine substitute for creeping Phlox for rock gardens and borders. Tr. pkt., 35c;  $\frac{1}{2}$  oz., \$1.00;  $\frac{1}{4}$  oz., \$1.75.

Latifolius Atrococcineus. 38,000 S. Clusters of bright crimson flowers on individual 12- to 15-inch stems. Fine for cutting. May-June flowering.

Tr. pkt., 35c; ½ oz., \$1.00; ¼ oz., \$1.75; 1 oz., \$5.25.

Loveliness. 15 in. Large, fringed and curled pastel and white flowers. Quite fragrant. Originator's seed. Tr. pkt., 80c;  $\frac{1}{16}$  oz., \$2.50;  $\frac{1}{4}$  ez., \$7.50.

Winteri. 16,400 S. Large, single flowers in a mixture of pure colors. Long blooming period. June-July. Tr. pkt., 60c;  $\frac{1}{2}$  oz., \$1.50;  $\frac{1}{2}$  oz., \$5.00.

PLUMARIUS (Clove Pink).

Cyclops. Rose and pink with crimson ring. Tr. pkt., 40c; ¼ oz., \$1.10.

Spring Beauty, Double Mixture (Scoticus). Various shades of pink, rose and white, some self colors, others with bright crimson zone. 1½-in. flowers on 12- to 15-inch stems. Tr. pkt., 35c;  $\frac{1}{8}$  oz., \$1.00;  $\frac{1}{4}$  oz., \$1.75; 1 oz., \$5.25.

BARBATUS (Sweet William). 2 ft. Early June flowering. Perfectly hardy, flowering second season from seed. All of the following named varieties are single except where noted.

#### **DIANTHUS, Continued**

• Auricula. Choice single mixture with very large flowers showing a clearly defined eye.

Dark Crimson. A smooth, velvety color.

Giant White. 17 in. Ours is an extra large flowered strain.

Holborn Glory. Striking combination of crimson center with white border. Very uniform. 18 inches tall. Clusters  $2\frac{1}{2}$  to 3 inches.

• Newport Salmon (Pink Beauty). 13 in. A particularly rich pastel salmon-rose shade. Very attractive.

Purple Beauty. 17 in. A rich, deep color.

Scarlet Beauty. 17 in. Well named, intense scarlet-red.

Double Mixture.

Single Mixture.

Prices above 9, each: Tr. pkt., 35c; 1/4 oz., 75c; 1 oz., \$2.60.

Double Midget Crimson. 6 to 8 in. A separate color selected from the popular Double Midget Mixture. True to type. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

- Double Midget Mixture. 6 to 8 in. Tr. pkt., 40c; ¼ oz., 90c; 1 oz., \$3.00.
- Single Midget Mixture. Very fine, neat alpine and rock plant. 4 to 6 in. with dense heads of single Sweet William flowers. Tr. pkt., 60c; ¼ oz., \$1.50; 1 oz., \$4.75.

#### DICENTRA

PERENNIAL (D. species) S. See below Frost germinator Spectabilis (Bleeding Heart), 6000 S. 3 ft. Rosy red flowers. Tr. pkt., \$1.50; ½ oz., \$4.50.

Eximia (Plumy Bleeding Heart). 16,000 S. Dwarf. 12 in. Rosepink. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

#### **DICTAMNUS**

PERENNIAL (D. fraxinella) 1700 S. Frost germinator Must be exposed to freezing temperatures for normal germination.

Fraxinella (Gas Plant). 21/2 ft. Pink with dark veins. Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.25.

#### DIDISCUS

ANNUAL (Trachymene caerulea) 10,000 S. 2-3 weeks 65-75° Useful for spring forcing, or outdoors in cool climates.

Blue Lace (Caeruleus). Small heads of light lavender flowers in sprays. Tr. pkt., 30c; ¼ oz., 80c; 1 oz., \$2.40.

Lace Veil. A pure white form of the above. Tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.00.

Pink Lace. Like the above but pale pink in color if grown in shade. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.







BE SURE TO INCLUDE ALL OF THE SWEET SIXTEEN VARIETIES ON YOUR SPRING SEED LIST THIS YEAR

# Gro. G. Ball

#### **DIGITALIS** (Foxglove)

#### PERENNIAL

(D. purpurea gloxiniaeflora) 180,000 S. 2-3 weeks 65-75° 4 ft. Biennial. This is an extra large flowered strain.



DIGITALIS, EXCELSIOR Unusually fine new Foxglove.

Excelsior (New). This unusually fine Foxglove carries its flowers at right angles to the stem rather than drooping downward as other types do. This feature reveals the full effect of the markings inside each flower. All colors are represented in this complete mixture. Tr. pkt., 45c; ½ oz., \$1.25; 1 oz., \$3.75.

Purple (Dark Red)
White

Rose

Giant Shirley Mixture

Prices above 4, each: tr. pkt., 35c; ½ oz., \$1.00; 1 oz., \$3.00.

#### DIMORPHOTHECA

(Cape Mariaold)

ANNUAL (D. aurantiaca) 9500 S. 2-3 weeks 65-75° A very attractive bedding

• Aurantiaca Mixture. 6 to 10 in. 2-inch, single, Daisy-like flowers in bright yellow, buff and orange shades.

Tr. pkt., 20c; 1/4 oz., 40c; 1 oz., \$1.25.

Glistening White. Large, Daisy-like flowers with black eyes, edged violet. Spreading plants 6-8 in. tall. Tr. pkt., 40c; ¼ oz., \$1.00; 1 oz., \$3.25.

#### **DORONICUM** (Leopards-Bane)

PERENNIAL (D. caucasicum) 18,000 S. 2-3 weeks 65-75°

Caucasicum, Magnificent. 2 ft. Large, yellow, Gerbera-like flowers with long stems. Keep well when cut.

Tr. pkt., \$1.00; ½ oz., \$2.25.

#### DRACAENA

**ANNUAL** (D. species) 1500 S. 5-7 weeks 65-75°

Indivisa. In the hull. The narrow-leaved and most popular variety. Tr pkt., 20c; 1 oz., 55c; 4 ozs., \$1.65.

Indivisa. Cleaned. 10,000 S. Hulled seed. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

Australis. 1000 S. The broader-leaved kind. Tr. pkt., 20c; ½ oz., 35c; 1 oz., \$1.00.

Dusty Miller. See Cineraria, page 18, and Centaurea, page 15.

#### **ECHINOPS** (Globe Thistle)

PERENNIAL 650 Seed Heads Per Oz.

65-75

Ritro. Metallic blue flower heads  $1\frac{1}{2}$  to 2 in. across are borne on 2- to 3-ft. plants. Can be dried for winter bouquets. Tr. pkt., 40c;  $\frac{1}{4}$  oz., \$1.10; 1 oz., \$3.25.

#### **EREMURUS** (Desert Candle)

PERENNIAL (E. rebustus) 1400 S. Frost germinator

Robustus (Foxtail Lily). 8 ft. Huge, 3-ft. spikes of bright rosepink. Blooms in 3 years from seed. Tr. pkt., \$1.00; 1/4 oz., \$3.50.

#### **EUPHORBIA**

ANNUAL (E. species)

S. See below 1-2 weeks 65-75°

Variegata (Snow-on-the-Mountain). 2500 S. 2 ft. Green leaves with white edges. Tr. pkt., 30c; 1 oz., 90c; 4 ozs., \$3.00.

Heteropyhlla (Annual Poinsettia or Mexican Fire Plant). 5000 S. 3 ft. Upper leaves blotched with red. Tr. pkt., 30c; ¼ oz., 70c; 1 oz., \$2.10.

PERENNIAL (E. species) S. See below 4-5 weeks 65-75°

Myrsinites. 2500 S. Attractive succulent-like silvery green foliage. Each branch produces a brilliant yellow bract of leaves in May. 6-8 in. tall. Tr. pkt., 35c; ½ oz., \$1.00.

Polychroma. 7000 S. 15 to 18 in. Bushy plants with bracts of bright yellow changing to rosy bronze. Tr. pkt., 60c; ½6 oz., \$1.35.

#### **EXACUM**

ANNUAL (E. affine)

1,000,000 S. 2-3 weeks 65-75°

• Affine. An excellent summer pot plant with richly fragrant violet-blue flowers. A December-January sowing with 3 to 5 seedlings in a 4 or 5 inch pot will make fine plants for summer sales. Shade glass during hot weather.

Tr. pkt., \$1.25; ½28 oz., \$3.00; ½4 oz., \$5.50.

#### **FEVERFEW**

See Matricaria, page 30.

# "SAME DAY SERVICE"

Still the byword after over fifty years of service to the florist industry. We



Our IBM order writing equipment is the latest available to help us deliver fast, accurate service.

well realize that changes in plans, oversights, etc., can make it very important that seeds be shipped promptly for timely sowing.

Orders in our morning mail are shipped the same afternoon with few exceptions. Afternoon orders are delivered to the post office the following day without exceptions.

The latest electronic IBM order writing equipment, plus our intricately coordinated, thoroughly trained and experienced staff are necessary to do this job for 20,000 U. S. flower growers.



#### GROW FOLIAGE PLANTS FROM BALL SEED

#### ADIANTUM (Maidenhair Fern)

#### ANNUAL

Ocean Spray. A sturdier growing form of this popular Fern. Fine for pots and combinations or for cutting, and easily grown from seed (spores). Full growing instructions with each order. Tr. pkt., \$1.75.

ASPARAGUS. See page 6.

DRACAENA. See page 23.

#### FICUS ELASTICA (Rubber Plant)

ANNUAL (F. elastica) 14 days 57

Ficus Elastica (New Decora strain with reddish stems and under leaves). Now you can grow this popular "Rubber Plant" from seed, producing salable 4-inch plants in 6 months. Germinates about 40% in 75°. Keep flats exposed to light—do not cover with paper. 300 seeds, \$4.50.

#### JACARANDA

ANNUAL 7 days 65° Mimosaefolia (New). A foliage plant of value for its graceful tern-like leaves—useful in all stages of growth and easy to grow from seed. In conservatories, will develop into trees with beautiful violet flowers, as seen outdoors in southern California. 100 seeds, 60c; 500 seeds, \$2.50.



#### PALM

**JACARANDA** 

ANNUAL (Collinea elegans) 180 S. 3-6 months 65° Chamaedorea Elegans (Neantha Bella). A miniature Palm from South America. Dwarf and graceful, and grows more rapidly than Kentia after germination. Requires less than 5 months at 70°. Use a friable sandy loam mixed with peat in potting. 1 oz. (about 200 seeds), \$1.50; 4 ozs. (about 800 seeds), \$5.00.

PLEASE NOTE: We can also supply a wide variety of other foliage plant seeds on request. Write us.

#### FREESIA

ANNUAL (F. hybrida)

3000 S. 3 weeks 6

Freesias are enjoying a "come-back" in popularity today, due to the fine new seed strains which make it possible to grow good cut flowers from seed. Seed sown in early spring will produce bulbs by September. These will bloom the following winter. Soak seed 24 hours before sowing.

SUPER GIANTS. The most choice strain, imported from a European specialist. Large flowers and long stems.

White Blue and Lilac Shades Red and Pink Shades Yellow and Orange Shades Mixture

Prices above 5, each: Tr. pkt., 1.00; ½ oz., 2.25; ½ oz., 7.50.

Refracta alba. White. Tr. pkt., 60c; 1/4 oz., \$1.35; 1 oz., \$4.00.

• Rainbow Mixture. Attractive mixture of blues, yellows and reds. Tr. pkt., 75c; ½ oz., \$1.50; ½ oz., \$2.75; 1 oz., \$8.25.

#### **FUCHSIA**

ANNUAL (F. hybrida).

70,000 S. 4-6 weeks 65-75°

**Special Mixture.** A choice mixture of single and double types saved from one of the finest collections in the country. 350 seeds, \$3.00; 700 seeds, \$5.50; 1400 seeds, \$10.00.

#### GAILLARDIA

ANNUAL (G. species) 14,000 S. 2-3 weeks 65-75° PICTA. Brightly colored, popular plants for beds and borders. The taller varieties make useful summer cut flowers.

#### SUNSHINE DOUBLE MIXTURE

2 ft. Fully double flowers about  $2\frac{1}{2}$  in. across are carried on strong stems 16 to 18 in. long. Attractive shades of winered, yellow and bicolor red and yellow. Good for summer cut flowers. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 70c; 1 oz., \$2.40.

Lorenziana Double Mixture. 12 in. Quite attractive and free flowering double strain of orange, yellow, red and rose shades. Tr. pkt.. 20c; 1/4 oz., 50c; 1 oz., \$1.50.

#### GAILLARDIA, Continued

TETRA.

• Red Giant. 2 ft. 2½-inch single flowers of solid, bright coppery red are produced in abundance on vigorous, bushy plants. Tr. pkt., 30c; ½ oz., 90c; 1 oz., \$2.70.

**PERENNIAL** (G. grandiflorum) 9500 S. 2-3 weeks 65-75° GRANDIFLORA. The following strains, except Goblin, are excellent cut flower sorts.

- Dazzler. The standard fine cutting strain. Golden yellow with maroon center.
- Monarch Strain. A superior mixture of large, full-petaled flowers in various red and yellow combinations.

Prices above 2, each: Tr. pkt., 30c; ¼ oz., 55c; 1 oz., \$1.85.

Burgundy. Deep shade of wine-red. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 75c; 1 oz., \$2.35.

Portola Strain. Large maroon-red flowers tipped with yellow. Tr. pkt.,  $30c; \frac{1}{4}$  oz., 80c; 1 oz., \$2.40.

Goblin. Forms very attractive, compact plants with red and yellow bicolored flowers. Quite free flowering. Tr. pkt., 25c; ¼ oz., 75c; 1 oz., \$2.35.

Gas Plant. See Dictamnus, page 22.

#### GAZANIA

ANNUAL (G. splendens)

12,000 S. 3 weeks 5

Splendens Grandiflora Mixture. 8 in. Daisy-like flowers, mostly orange, with shades of yellow and white. The vigorous plants are constantly in bloom. Stands hot, dry weather well. Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$3.75.

#### **GERANIUM**

ANNUAL (Pelargonium zonale hyb.) 6000 S. 4-6 weeks 55-65° Easily grown from seed, but should be sown early for summer blooms.

Florist Mixture. Extra large flowered singles. The country's finest strain of seed grown Geraniums. 500 seeds, \$1.75; 2,000 seeds, \$5.25.

Zonale. A single mixture of white, pink, salmon and red. Tr. pkt., 50c; ¼ oz., \$2.00; 1 oz., \$6.00.

#### GERBERA (Transvaal Daisy)

ANNUAL (G. Jamesoni)

8000 S. 2-3 weeks 65-75°

Duplex Mixture. 2.2½ ft. This splendid strain produces large, 5-inch flowers with twice as many petals as the ordinary single type. All colors except blue, are represented with flowers being carried on long, strong stems.

100 seeds, 65c; 1000 seeds, \$5.50; 5000 seeds, \$25.00.

#### **GESNERIA**

ANNUAL (C. macrantha)

650,000 S. 3 weeks 65-70°

Macrantha. The Gloxinia-like leaves of this attractive pot plant are crowned with an upright central stem bearing many slender, tubular, brilliant scarlet flowers. Sow January to March for late fall and Christmas plants. Keep shaded during summer. Tr. pkt., \$1.25.

#### **GEUM**

**PERENNIAL** (G. varieties) 7000 S. 3-4 weeks 65-75° The following two provide nice cut-flower material and are perfectly winter hardy with some protection.

Lady Stratheden. 2 ft. Double golden yellow.

Mrs. Bradshaw. 2 ft. Double glowing red.

Prices above 2, each: Tr. pkt., 30c; 1/4 oz., 90c; 1 oz., \$2.70.

#### **GLADIOLUS**

ANNUAL (G. hortulanus)

5500 S. 2 weeks 65-75°

Color Cavalcade. A wonderful assortment of colors from hand-pollinated crosses. If seed is sown in fall, bulblets may be harvested in March and replanted in May to be harvested in fall as blooming size bulbs for following spring planting. 250 seeds, \$1.00; 1000 seeds, \$3.00.

#### GOMPHRENA (Globe Amaranth)

ANNUAL (G. globosa)

5500 S. 2-3 weeks 65-75°

GLOBOSA. A very showy garden flower, and the taller varieties have value for cutting. Can be dried for winter bouquets. Does exceptionally well in hot, dry locations but is "at home" almost anywhere. Better try some Gomphrena if you've never grown it.



#### DOT 'N DASH

(New). A formula blend of the two dwarf Gomphrenas, Buddy and Cissy. Plant this for a really striking contrast. Tr. pkt., 60c; ¼ oz., \$1.00; 1 oz., \$3.00.

Rubra. 18 in. One-inch, ball-shaped flowers of bright reddish purple.

Orange (New), 2 ft.

Pink (New). 2 ft.

Mixture of purple, silvery white, pink and orange.

Prices above 4, each: tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.50.

• Buddy. 9 in. Fairly dwarf plants with small, ball-shaped flowers of bright reddish purple. This is the true dwarf strain. Fine for bedding, pot plants or combination boxes.

Tr. pkt., 60c; 1/4 oz., \$1.00; 1 oz., \$3.00.

Cissy (New). 9 in. The same dwarf, compact habit of growth as Buddy, but with silvery white flowers.

Tr. pkt., 60c; ½ oz., \$1.00; 1 oz., \$3.00.



GLOXINIA, PANZER SCARLET
Originator's Strain

#### **GLOXINIAS**

ANNUAL (Sinningia speciosa) 800,000 S. 2-3 weeks 65-75°

Try Gloxinias from seed. A December sowing (70° and no covering for best germination), carried along at 65° during the winter will make fine, salable, 4- and 5-inch blooming plants in June. Suggest potting mix of ½ light organic soil and ½ sand. Shade lightly in winter, more heavily in bright months, and water with care never to let them dry out. Keep them growing. 3-inch spacing in flats or open beds is O.K. instead of small pots for first transplanting.

#### ● PANZER SCARLET Originator's Seed ==

Pictured above. This deep, bright velvety red is the color in Gloxinias—Mr. Panzer produces many thousands of Gloxinias for shipping and offers this color only. The originator's strain has been reselected by Mr. Panzer and is now offered with assurance that it has no peer in commercial Gloxinia seed strains. Mr. Panzer's full cultural directions sent with each packet. Tr. pkt., \$3.00; 5 tr. pkts., \$13.50.

Tigered and Spotted. Very attractive mixture of colors. Tr. pkt., \$1.25; 6 pkts., \$6.00.

• Formula Mixture. Made up of choice named separate color varieties. All colors are represented including bicolors and spotted types. Tr. pkt., \$1.25; 6 pkts., \$6.00.

Scarlet (Etoile de Feu)
Violet (Prince Albert)
White (Mont Blanc)
Scarlet and White
(Emp. Frederick)

Violet and White (Emp. William) Rose Sensation Dark Pink (Oueen Wilhelmina)

Dark Pink (Queen with

Prices above 7, each: Tr. pkt., \$1.25.

COLLECTION of 1 tr. pkt. each above 7 separate colors, \$7.50.

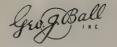
#### Imported Flexible-Leaved Strain

This new strain is reported by its originator to have softer and more flexible leaves than the ordinary type, permitting it to be handled and packed without danger of leaf breakage.

Blood-Red Blue

Prices above 2, each: tr. pkt., \$2.00; 1/128 oz., \$6.00.

Gloriosa Daisy. See Rudbeckia, page 50.



#### GODETIA

ANNUAL (G. grandiflora), 95,000 S. 2-3 weeks 65-75° Should be grown in flats or shallow benches for greenhouse cut flowers. Handle like Clarkia.

UPRIGHT SINGLE. 18 in. This class is especially attractive and much grown for greenhouse cut flowers.

Duke of York. Bright carmine and white.

Kelvedon Glory. Rich apricot.

Prices above 2, each: tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.90.

DWARF DOUBLE AZALEA-FLOWERED

Sybil Sherwood. 18 in. Bright salmon-pink, edged white. Tr. pkt., 30c; ½ oz., 60c; 1 oz., \$2.00.

#### GOURDS, ORNAMENTAL

ANNUAL 500 S. 2-3 weeks 65-75° SMALL VARIETIES. All are easily grown and, when properly dried and varnished, last indefinitely.

Spoon. Orange and green fruits with long. slender necks.

Warted Types, Mixture. Not over 4 in. in diameter.

Small Varieties, Mixture. Attractive assortment.

Prices above 3, each: tr. pkt., 25c; 1 oz., 90c.

See page 66 for Halloween Pumpkins.

#### GRASS, ORNAMENTAL

ANNUAL (Pennisetum ruppelianum) 14,500 S. 30 days. 65° Pennisetum ruppelianum (Fountain Grass). 3 to 4 ft. Long, graceful, purple sprays. A very striking background plant. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### **GREVILLEA**

ANNUAL (G. robusta) 3000 S. 2-3 weeks 65-75°

Robusta (Australian Silk Oak). Good foliage plant. Stands heat well, tolerates sun and shade, holds foliage. August and September sowings grown at 60° produce good 2½-in. pots for winter sales. Tr. pkt., 40c; ½ oz., \$1.35; 1 oz., \$4.00.

#### **GYPSOPHILA**

ANNUAL (G. elegans) 24,000 S. 2-3 weeks 65-75° ELEGANS. Easily flowered in flats in the greenhouse or may be grown outdoors; requires about 3 months to bloom from sowing. Although the larger flowered varieties are attractive and fine, the smaller ones outlast them for bouquet work.

Carminea. Small. ¼-in. pink flowers. Tr. pkt., 15c; 1 oz., \$1.20; 4 ozs., \$4.00.

- Covent Garden Market. A very excellent strain with large and full-petaled white flowers, about 15% of which have 6 to 8 petals. 1 oz., 30c; 4 ozs., 75c; 1 lb., \$2.50; 5 lbs., \$10.00.
- Paris Market. Smaller flowered than Covent Garden Market. Used extensively in southern states for winter blooming. Holds up well. 1 oz., 30c; 4 ozs., \$1.20; 1 lb., \$3.60.

**PERENNIAL** (G. species) 34,000 S. 1-2 weeks 65-75° Valuable for outdoor summer cutting; easily and economically grown.

• Pacifica. 3 ft. Starry pink flowers in September and October. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

Oldhamiana.  $2\frac{1}{2}$  ft. Feathery light pink flowers with silvery foliage. Blooms first year from an early sowing. October flowering—watch frost dates. Tr. pkt., 25c;  $\frac{1}{4}$  oz., 75c; 1 oz., \$2.50.

#### GYPSOPHILA, Continued

PANICULATA (Baby's Breath). The regular white hardy Gypsophila. Note that double grafted varieties like Bristol Fairy are not available from seed.

• Double Snow Flake. 3 ft. An improved double hardy Gypsophila. About 50% are double flowering plants.

Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$5.00.

Single White. 3 ft. Tr. pkt., 25c; 1 oz., \$1.00; 4 ozs., \$3.00.

REPENS. 6 in. An attractive, hardy rock garden plant.

Rose. Tr. pkt., 45c; 1/4 oz., \$1.35; 1 oz., \$3.90.

#### **HELIANTHEMUM** (Sun Rose)

PERENNIAL (H. nummularium) 15,000 S. 2-3 weeks 65-75° Mutabile. 8 to 10 in. Very attractive, dwarf, evergreen rock plant completely covered with blooms in mixed colors during July and August. Tr. pkt., 35c; ¼ oz., 60c; 1 oz., \$1.80.

#### **HELIANTHUS** (Sunflower)

ANNUAL (H. annuus)

650 S. 2-3 weeks 65-75°

• Sungold. Of uniform medium height (4 to 5 ft.) with practically 100% fully double, golden yellow Chrysanthemum-like flowers about 4 in. across. Makes a good cut flower. Sow outdoors in May for August blooming.

1/4 oz., 40c; 1 oz., \$1.20; 4 ozs., \$4.00.

#### **HELICHRYSUM** (Everlasting)

ANNUAL

(H. bracteatum monstrosum) 36,000 S. 2-3 weeks 65-75° The most popular double Strawflower. Widely used for drying.

Formula Mixture. Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.40.

#### **HELIOTROPE**

ANNUAL (Valeriana officinalis). 50,000 S. 3-4 weeks 65-75° Heliotropes do best in heat and rich soil.

Dwarf Regale Mixture. 15 in. A fine, even strain with extra large, lavender-violet flower heads. Richly fragrant. Tr. pkt., 40c; ¼ oz., \$1.00; 1 oz., \$3.25.

First Snow. Large, clear white flowers on bushy plants. Very fragrant, and unusually attractive.

Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

• Marine. Excellent large flowered, deep violet. Originator's seed. Tr. pkt., 55c; ¼6 oz., \$1.60; ¼ oz., \$4.80.

#### HELLEBORUS

PERENNIAL (H. niger) 3600 S. Frost germinator Niger (Christmas Rose). Attractive, 2½-in. white flowers; basal foliage. Seed should be frozen before sowing or sown outdoors in fall for best results. Tr. pkt., 30c; ½ oz., 60c; 1 oz., \$1.80.

Choice Mixture. Large flowered, white, lavender and rose. Tr. pkt., 60c; ¼ oz., \$1.20; 1 oz., \$3.60.

#### **HEUCHERA** (Coral Bells)

**PERENNIAL** (H. sanguinea) 750,000 S. 2-3 weeks 65-75° Small, cup-shaped flowers boine in slender panicles. 2 ft.

Splendens. Crimson.

Mixture. Shades of red through rose to white.

Prices above 2, each: Tr. pkt., 60c; 1/16 oz., \$1.75; 1/8 oz., \$3.25.

## Gro. g. Ball

#### **HIBISCUS**

**PERENNIAL** (H. species) 7000 S. 2-3 weeks 65-75° Large, showy, tropical flowers. Needs moisture.

Mallow Marvels Mixture. 4 ft. Well balanced color range. Flowers first year. Tr. pkt., 25c; ½ oz., 60c; 1 oz., \$1.80.

◆ Avalon. 5 ft. This is an exceptional mixture of genuine F2's with colors ranging from blush-pink to bright red. The blooming period (early July to late September) is much longer and the flowers larger than the regular Mallow Marvels. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### HOLLYHOCK

**ANNUAL** (Althaea rosea) 2000 S. 2-3 weeks  $70-80^{\circ}$  Plants should be banded or Jiffy-Potted early before tap roots grow down.

• Indian Spring. 4 to 5 ft. Starts to bloom 5 months from seed sowing and continues until frost. Semi-double, light pink and rose flowers are borne mostly on central spikes.

Tr. pkt., 45c; ¼ oz., 80c; 1 oz., \$2.40.

PERENNIAL (Althaea rosea) 3000 S. 2-3 weeks 65-75° 6 to 8 ft. Popular and well known perennial.

Imperator Improved. Choice double crested "Tuberous Begonia-Flowered" mixture. Tr. pkt., 35c; ¼ oz., 65c; 1 oz., \$2.00.

#### TRIUMPH<sup>3</sup>

Extra large, fully double flowers in unusual, delicate art shades. Most blooms are attractively fringed. May be handled as an annual—if sown indoors in February and transplanted to the open in spring, all plants will flower nicely the same summer. Tr. pkt., 35c; ¼ oz., 65c; 1 oz., \$2.00.

CHATER'S DOUBLE. The standard double.

Newport Pink Scarlet Deep Rose Sulphur-Yellow White Mixture

Prices above 6, each: Tr. pkt., 35c; 1/4 oz., 65c; 1 oz., \$2.00.

#### **HUNNEMANNIA** (Bush Escholtzia)

ANNUAL (H. fumariaefolia) 8000 S. 2

8000 S. 2-3 weeks 65-75°

Sunlite. 2 ft. Brilliant canary-yellow, semi-double. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

### IBERIS (Hardy Candytuft)

**PERENNIAL** (I. species) 11,500 S. 2-3 weeks 65-75° Plants flower second season from seed.

Gibraltarica. 12 in. Large flowered lilac. Tr. pkt., 25c; ½ oz., 50c; 1 oz., \$1.50.

Sempervirens. 12 in. White flowers in late May. Needs ample moisture. Tr. pkt., 55c;  $\frac{1}{4}$  oz., \$1.35; 1 oz., \$4.75.

#### **IMPATIENS**

See page 28.

#### **IPOMOEA**

See Morning Glory and Moonflower, page 31.

#### INCARVILLEA

**PERENNIAL** (1. species) 6000 S. 2 weeks 65-75° Funnel-shaped flowers borne in clusters.

Grandiflora Brevipes. 18 in. Brilliant crimson-rose flowers.

Delavayi. 2 ft. Large, Gloxinia-like rosy purple flowers.

Prices above 2, each: Tr. pkt., 60c; ¼ oz., \$1.80; 1 oz., \$5.40.

#### IRIS

PERENNIAL (I. species) 7000 S. Frost germinator Plants bloom second season from seed.

Dichotoma (Vesper Iris). 2 ft. Assorted colors; fragrant. Tr. pkt., 45c; ¼ oz., \$1.30; 1 oz., \$3.90.

Kaempferi (Japanese Iris). 2 ft. A wide variety of colors with many doubles. Tr. pkt., 40c; ¼ oz., 75c; 1 oz., \$2.35.

#### **KALANCHOE**

ANNUAL (K. blossfeldiana) S. See below 1-2 weeks 65-75°

Because of its showiness and ability to hold up well in the home, this plant is becoming more widely used each year. While they flower normally in January and February, they may be had in bloom for Christmas from a January sowing, if shaded for about 4 weeks starting September 1. April sowings produce good 3's for the following winter. Need 60° minimum nights, good air circulation.

- Tom Thumb. 2,500,000 S. 8 in. Produces perfectly rounded, symmetrical plants literally covered with small bright scarlet flowers. A January or February sowing will provide fine 4 or 5 in. specimens for next winter's sales. Ours is the original true-to-name strain of this popular variety.

  Tr. pkt., \$1.50; ½28 oz., \$3.00; ½44 oz., \$5.50; ½2 oz., \$10.00.
- Brilliant Star. 1,000,000 S. 18 in. A fine pot plant, producing flowers three times the size of the common varieties and of a brighter, fiery red color. Also valuable for cutting.

  Tr. pkt., \$1.00; ½28 oz., \$2.10; ½4 oz., \$3.85; ½2 oz., \$7.00.

Kale. See Flowering Cabbage, page 7.

#### **KOCHIA** (Summer Cypress)

ANNUAL (K. childsii)

45,000 S. 1-2 weeks 65-75°

Childsii. 2 ft. Symmetrical oval plants stay green throughout the entire season. Used for summer hedges.

Tr. pkt., 15c; 1 oz., 50c; 4 ozs., \$1.80.

#### LANTANA

ANNUAL (L. camara)

1300 S. 6-7 weeks 65-75°

Very showy. One of the most satisfactory bedding subjects for areas where summer heat is excessive. Must be sown early with bottom heat.

Dwarf Mixture. 12 in. All colors. Tr. pkt., 30c; ½ oz., 90c; 1 oz., \$2.70.

#### GROWER TALKS

Our GROWER TALKS is the only commercial monthly publication which is devoted exclusively to flower growing: suggestions for items to grow, sowing dates, insect and disease controls, varieties, etc. Yours for 1 year for \$1.25; 3 years for \$3.50. BINDER for 24 issues of GROWER TALKS, \$1.50.



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IMPATIENS, DWARF BRIGHT ROSE



IMPATIENS, DWARF BRIGHT ORANGE

### Impatiens "SULTANS"

ANNUAL

66,000 S. 2-3 weeks 65-75° (I. holstii and sultanii hybrids)

We feel that Impatiens have been overlooked by many bedding plant growers. The plants require partial or complete shade, where the dwarf varieties attain approximately the size of bedding Petunias. They are covered with blossoms of intense color that possess a luminous sheen seldom equalled in any bedding plant. Impatiens begin blooming very early, often flowering before "pak" or flat sales.

DWARF. 6 to 8 inches.



#### DWARF MIXTURE

Bright mixture of dwarf varieties including above colors and other shades. Excellent for shade bedding.

Tr. pkt., \$1.50; \(\frac{1}{32}\) oz., \$3.00; \(\frac{1}{16}\) oz., \$5.75;  $\frac{1}{8}$  oz., \$10.50.

Dwarf Bright Rose. A luminous shade of deep rose. Compact and free flowering.

Blaze. Bright scarlet-orange with attractively contrasting dark foliage. Dwarf, spreading growth.

Pinkie. Large flowers of bright coral-rose with salmon cast.

This is an entirely new color in dwarf Impatiens.

Prices above 3, each: Tr. pkt., \$1.50; ½2 oz., \$3.00; ½6 oz., \$5.75; ½ oz., \$10.50. Light Pink (New). Pale shrimp or flesh-pink flowers on couplants. Blends well with darker colors. Tr. pkt., \$1.50. Limit. Pure White (New). ASSYDERECT The first absolutely snow-white Impatiens from seed. Supply limited. 300 seeds, \$2.50.

It's important for most bedding purposes to confine your use to the dwarf strains which retain much better plant habit in late stages of growth. Impatiens tolerate a wide range of temperature and will grow well with most spring subjects. Try them from seed -one of the few annual subjects which can be depended upon to produce an abundance of colorful blooms throughout the summer in shade. Dwarf varieties also make appealing pot plants in 3's

#### **● DWARF BRIGHT ORANGE**

Very uniform, extra dwarf, flat, spreading growth. This is an outstanding bright shade of orange and should sell very readily as a bedding subject for shade. Similar to European strains of Beauty of Klettgau, but our trials indicate it is superior in uniform dwarf habit.

Tr. pkt., \$1.75; 1/32 oz., \$4.50; 1/16 oz., \$8.00.

SEMI-DWARF. 9 to 12 inches.

Salmon-Rose.

Autumn Glow. Brilliant orange-scarlet flowers.

Prices above 2, each:

Tr. pkt., \$1.50;  $\frac{1}{2}$  oz., \$3.00;  $\frac{1}{16}$  oz., \$5.75;  $\frac{1}{8}$  oz., \$10.50.

TALL

Holsti Mixture. Bright mixture of pink, rose, salmon, orange, red, orchid and purple shades. Tr. pkt., 50c;  $\frac{1}{16}$  oz., 1.10;  $\frac{1}{8}$  oz., 2.00.



was the beginning-Geo. J. Ball greenhouse at Gien Ellyn, III., 1907. Ball Asters, Calendulas, and Sweet Peas were developed here.

#### BALL GREENHOUSES . . .

Where we constantly conduct tests of the latest varieties and production techniques of such commercially important crops as Mums of all types, Snapdragons, Carnations, Asters, Stocks, and numerous potted plants, including Begonias, Kalanchoes, Cyclamen, etc.

Testing is in progress in the newest material and equipment available in greenhouse cooling and plastic material for temporary greenhouses.



Although some of our glass is over 50 years old, our range of over 100,000 ft. demonstrates most important recent innovations in green-house equipment.

## Gro. g. Ball

#### **LARKSPUR**

ANNUAL (Delphinium ajacis) 8000 S. 3-4 weeks 55-65° For Early Summer Cut Flowers Outdoors: If you failed to make an outdoor sowing last fall, good results can be had from a spring sowing—if you get your seed in the ground just as soon as the frost is out of it. Figure on 2 lbs. of seed to sow an acre or 1 oz. for 600 to 700 ft. of row, if seeds are sown about 1 inch apart. Height outdoors 2 to 3 ft.

Under Glass—Spring Flowering: For indoor growing, Larkspur is a nice crop to follow late Mums. Well started 3-inch banded or potted plants should be ready, and are produced by a December or January sowing. Space at least 12x12 in. on ground; 10x10 in. on raised beds should be ample. Maintain night temperature of not over 50°. Height indoors 4 to 5 ft.

Varieties: The Regal, Supremes and Super Majestics have largely taken the place of the old Giant Imperials. If your're not familiar with them, we suggest that you confine the bulk of your planting to the "7 Best" listed below.

PLEASE NOTE: Pound price applies to ½ pound or more of one variety only—not allowed for several varieties totaling 1 pound. All varieties listed below are base branching except the Hyacinth Flowered.

#### \_\_\_\_\_\_"7 BEST"\_\_

This list is based on our greenhouse flowering trials. Generally strains which are found best under glass seem also best adapted to outdoor culture.

- Salmon Supreme. Medium salmon-rose; fully double spikes.
- Dark Blue Supreme. The best deep violet-blue.
- Lilac Supreme. The best clear lavender; no orchid shading.
- White Supreme. The most vigorous white in our trials.
- Regal Salmon-Pink. A shade lighter than Salmon Supreme.
- Super Majestic Light Blue. An excellent light blue; outstanding.
- Brilliant Rose. Deepest rose of all; fully double.
- 7 Best Mixture. Blended by formula from these 7 varieties.

**Prices** above 7, each: Tr. pkt., 40c; ½ oz., \$1.00; 1 oz., \$1.80; 4 ozs., \$6.00; 1 lb., \$18.00.

COLLECTION: One tr. pkt. each of above 7 named varieties for \$2.35.

#### OTHER GOOD VARIETIES

#### WHITE

Super Majestic White. Long-stemmed pure white.

Regal White. Fine, compact spikes.

#### LAVENDER AND BLUE

Super Majestic Lavender. Beautiful lavender-mauve.

Super Majestic Rosy Mauve. Rich dark lilac shade.

#### SALMON AND ROSE

Rose Supreme. Clear deep rose.

Super Majestic Rose-Pink. Excellent deep rose.

 Regal Rose. Rich deep rose with fine, heavy spikes and large, double florets.

#### **MIXTURES**

Supreme Mixture. All Supreme colors.

Super Majestic Mixture.

Prices above 9, each: Tr. pkt., 40c;  $\frac{1}{2}$  oz., 1.00; 1 oz., 1.80; 4 ozs., 6.00; 1 lb., 1.800.

HYACINTH-FLOWERED. Produces one long non-branching spike. Early and non-shattering. For greenhouse use only. Space about 4x5 inches.

Dark Blue Lavender Pink
Purple White Mixture

Prices above 6, each: tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

#### **LATHYRUS**

PERENNIAL (L. latifolius) 500 S. 2-3 weeks 65-75° LATIFOLIUS (Hardy or Everlasting Sweet Pea). 7 ft. Abundant source of short-stemmed flowers.

Prices above 4, each: tr. pkt., 35c; ½ oz., 65c; 1 oz., \$1.90.

#### LAVANDULA (Lavender)

PERENNIAL (L. vera) 32,000 S. 2-3 weeks 65-75°

Munstead Strain. 12 in. Freely produces large sweet-scented flowers a month earlier than the common Lavender. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

#### **LIATRIS** (Gayfeather)

**PERENNIAL** (L. species) 9500 S. 3-4 weeks 65-75° Excellent cut flowers with long, decorative, bold spikes. All are easily grown. 3 to 5 ft.

• Pycnostachya. Extra long-stemmed with long, 15 to 18 inch flower spikes of rosy purple. Finest cut-flower kind.

Scariosa Purple Scariosa White

Prices above 3, each: tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.00.

• September Glory. Tall growing with purple spikes. Tr. pkt., 60c; ¼ oz., \$2.00; 1 oz., \$6.00.

**Elegans.** Large, starry blooms of pure lavender with snow-white center. Tr. pkt., 60c;  $\frac{1}{4}$  oz., \$2.00; 1 oz., \$6.00.

#### LILIES (Lilium)

**PERENNIAL** (Lilium species) 8000 S. 3-5 weeks 65-75° Usually bloom the second season from seed.

• White Queen. This is the largest and finest seed propagated Lily we know of. Produces a plentiful quantity of real quality flowers in 16-18 months from seed. Pure white.

½ tr. pkt., 75c; tr. pkt., \$1.25; ½ oz., \$2.75; ½ oz., \$5.00.

Candidum (Madonna Lily). Tall pure white. Tr. pkt., \$1.25; ½ oz., \$2.75; ½ oz., \$5.25; 1 oz., \$16.50.

Formosanum, Giant Flowered. An improved form of Philippine Lily. White flowers. Tr. pkt., 60c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$13.00.

Tenuifolium (Coral Lily). Freely produces medium sized flowers of brilliant coral-red. 18-20 in. tall. May flowering. Tr. pkt., 60c; ¼ oz., \$1.50; 1 oz., \$4.50.

#### LINARIA

ANNUAL (L. maroccana)

600,000 S. 2-3 weeks 65-75°

MAROCCANA (Miniature Snapdragon).

Northern Lights. An improved taller growing Linaria containing many new bright shades. Tr. pkt., 40c; ¼ oz., \$1.35; 1 oz., \$4.00.

#### LINUM

Perennial (L. species) 8500 S. 34 weeks 65-75°

Perenne (Perennial Flax). 2 ft. Attractive blue flower on slender stems, Tr. pkt., 30c; 1 oz., 90c.

Flavum Compactum. 8 in. Golden yellow flowers with dark green foliage. Ideal for rock gardens.

Tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.50.

Collinum. Dwarf growing, bright blue. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.



#### LOBELIA

ANNUAL (L. erinus)

700,000 S. 2-3 weeks 65-75°

For partially shaded locations and for plant combinations, Lobelias provide the brilliant blues lacking in most plants. Many growers prick off seedlings in bunches of 3 or 4 instead of individually.

COMPACTA, 6 in. Of dwarf, compact habit. Good edger.



#### • CRYSTAL PALACE

Very dwarf deep blue with dark bronzy green foliage. A fine variety. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

• Blue Gown. Free flowering deep blue. Very fine.

Cambridge Blue. Very dwarf, light blue.

Mrs. Clibran Imp. Deep blue; white eye and light foliage.

White Lady. Clear glistening white.

Prices above 4, each: tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$3.75.

Rosamond (New). Rich, violet-rose with white eye. Tr. pkt., 75c; ½6 oz., \$1.35; ½ oz., \$4.00.

Mixture of all colors in the compacta class. Tr. pkt., 25c; ½ oz., 75c; 1 oz., \$2.25.

PENDULA. Of trailing or pendulous habit.

Hamburgia. Deep blue with dark green foliage.

Sapphire. Deep blue with white eye. Light green foliage.

Prices above 2, each: tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

PERINIAL (L. cardinalis). 725,000 S. 3-4 weeks 65-75° Cardinalis (Cardinal Flower). 3 ft. Bright cardinal-red. Tr. pkt., 40c; ½ oz., 90c; ½ oz., \$2.70.

#### LOVE APPLE

ANNUAL

(Solanum aculeatissimum) 10,400 S. 2 weeks 65-75° These colorful plants are widely used for floral arrangements when dried.

Orange Fruited. 2 ft. Long, thorny branches of bright orange fruits about 1½ inches across. Tr. pkt., 50c; ½ oz., \$1.75.

See also Cherries, Christmas, page 15; Peppers, Christmas, page 34

### LUNARIA (Honesty or Money Plant)

PERENNIAL (L. biennis)

1500 S. 2-3 weeks 65-75°

Large, papery seed-pods used in dried bouquets. 2 ft.

White Mixture

Prices above 2, each: tr. pkt., 25c; ½ oz., 40c; 1 oz., \$1.40.

#### LYCHNIS

PERENNIAL (L. species) 64,000 S. 3-4 weeks 65-75°
Chalcedonica (Maltese Cross). 3 ft. Scarlet flowers in heads.
Tr. pkt., 25c; \(^1\)4 oz., 60c; 1 oz., \$1.80.

Forrestii. 15 in. Mixture of rose, lilac, white and red. Excellent cut flower and bedding plant.

Tr. pkt., 35c; ¼ oz., \$1.10; 1 oz., \$3.30.

#### **LUPINE** (Lupinus)

ANNUAL (L. Hartwegii) 1300 S. 2-3 weeks 65-75° GIANT KING (Improved Hartwegi). 3 ft. Makes a nice spring cut-flower crop flowered in 3-inch pots from a January sowing spaced close so as to flower one spike to a plant.

• Oxford Blue. Deep blue. Sky-Blue White Mixture Prices above 4, each: Tr. pkt., 25c; 1 oz., \$1.00; 4 ozs., \$3.00.

**PERENNIAL** (L. polyphyllus) 1000 S. 3-4 weeks 65-75° Hardy Lupine. 4 ft. Fine for cutting. Requires a well drained location and thrives best in cool climate.

#### • RUSSELL STRAIN=

Long, closely set spikes of extra large florets in rich self colors and unusual bicolors. Developed by a famous English specialist.

RESELECTED STOCK (Originator's packets): 65 seeds, 65c; 150 seeds, \$1.25; 350 seeds, \$2.50.

REGULAR SEED: Tr. pkt., 40c; ½ oz., 65c; 1 oz., \$2.10; 4 ozs., \$6.50.

MISCELLANEOUS POLYPHYLLUS VARIETIES. 1450 S.

Dark Blue Rose White

Prices above 3, each: tr. pkt., 35c; \( \frac{1}{4} \) oz., 65c; 1 oz., \$2.00.

Harkness Regal Mixture. The standard fine hybrid mixture. Tr. pkt., 20c;  $\frac{1}{4}$  oz., 35c; 1 oz., \$1.10.

#### **MARIGOLDS**

See pages 32 and 33.

#### MARVEL OF PERU

ANNUAL (Mirabilis jalapa) 325 S. 2-3 weeks 65-75° Mixture. 2½ ft. A uniform strain of old-fashioned "Four O' Clocks." Fine range of bright colors. Roots can be stored indoors over winter in North. Tr. pkt., 20c; 1 oz., 40c.

#### MATRICARIA (Feverfew)

PERENNIAL (M. capensis) 145,000 S. 2-3 weeks 65-75° CAPENSIS. 18 in. grown outside; 3 to 5 ft. when grown in greenhouse. Sow in October and November for greenhouse cutting late April through Decoration Day. A January sowing will bloom outdoors in July.

#### • BALL DOUBLE WHITE IMPROVED ==

This strain has been carefully reselected for fully double flowers, and our own trials show it to be well over 90% true, double, imbricated blooms. Nearly all of the single and Anemone types have been removed. *Ball Orig. Seed.* Tr. pkt., \$1.00; ½6 oz., \$2.00; ½ oz., \$6.00; 1 oz., \$18.00.

Double White, Regular. A regular strain of double and semi-double Matricaria with some showing yellow centers. Tr. pkt., 40c; ½ oz., \$1.10; ½ oz., \$2.00; 1 oz., \$6.00.

ALL-DOUBLE DWARF. 8 to 10 in. Uniformly dwarf and compact plants which are a solid mass of ball-shaped flowers slightly over ½ inch across. Very attractive for border work and makes an excellent pot plant.

- Golden Nuggets. Rich butter-yellow.
- Snow Puffs. Pure white; very effective.

Prices above 2, each: tr. pkt., 35c; ½6 oz., 60c; ½ oz., \$2.00.

Foxglove. See Digitalis, page 23.

## Gro. g. Ball

#### MESEMBRYANTHEMUM

ANNUAL (M. criniflorum) 100,000 S. 2-3 weeks 65-75° Criniflorum (Livingstone Daisy). 6 in. Spreading plants liter-

ally covered with 1-in. flowers in many attractive colors. Needs full sun and a dry location.

Tr. pkt., 50c; ¼ oz., \$1.20; 1 oz., \$3.60.

#### MIGNONETTE

ANNUAL (Reseda odorata) 27,000 S. 2-3 weeks 65-75°

Ball Forcing Strain. 16 in. Earliest and whitest forcing variety.

Sow in January for spring cutting; very fragrant.

Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### MIMOSA

ANNUAL (M. pudica) 4500 S. 3-4 weeks 65-75°

Pudica (Sensitive Plant). Leaves close when touched. Interesting novelty. Tr. pkt., 30c; ¼ oz., 65c; 1 oz., \$2.00.

#### MOONFLOWER

ANNUAL (Ipomoea noctiflora) 110 S. 3-4 weeks 65-75°

Black-Seeded. Large flowered, climbing, white Moonflower.

Tr. pkt., 20c; 1 oz., 60c; 4 ozs., \$2.00.

#### MORNING GLORY

ANNUAL (Convolvulus species) 650 S. 3-4 weeks 65-75° These vines are easily grown and most varieties are profuse bloomers, if grown in soil of low fertility and not over-watered. Sow 4 or 5 weeks before bedding sales. Band or pot seedlings 1 week after germination to prevent transplanting shock.

Candy Pink. Large, clear pink flowers. Plants are somewhat shorter and more spreading than most varieties.

Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.65; 4 ozs., \$5.50.

- Pearly Gates. Clear white with slight cream shading in throat. Tr. pkt., 30c; 1 oz., 90c; 4 ozs., \$3.00.
- Heavenly Blue. Clark's Mammoth Early Free Flowering Strain. The popular bright blue shade that is a solid sheet of vivid color all summer. Tr. pkt., 20c; 1 oz., 75c; 4 ozs., \$2.25.

Scarlett O'Hara. Vivid crimson-scarlet. Improved climbing strain. Tr. pkt., 20c; ½ oz., 45c; 1 oz., \$1.25.

#### MYOSOTIS (Forget-Me-Not)

ANNUAL (M. oblongata)

44,000 S. 2-3 weeks 65-75°

• Ball Early. Sold out.

**PERENNIAL** (M. species) 42,000 S. 2-3 weeks 65-75°

• Blue Bird (Oblongata). 31,500 S. 12 in. Standard blue for spring greenhouse flowering. Tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$3.25.

Palustris Semperflorens. 12 in. Dwarf blue. Flowers from early spring until autumn. Tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$3.25.

VICTORIA. A dwarf, compact strain. 6 to 8 in.

Dark Blue Rose White Dwarf Mixture

**Prices** above 4, each: tr. pkt., **40c**;  $\frac{1}{8}$  oz., **90c**;  $\frac{1}{4}$  oz., **\$1.65**; 1 oz., **\$4.90**.

ALPESTRIS. Biennial.

Blue Eyes. Early flowering bright blue with white eye. Tr. pkt., 60c; 1/4 oz., \$1.50; 1 oz., \$4.75.

• Royal Blue (Indigo Blue). 12 in. Deep rich blue. Tr. pkt., 40c; ¼ oz., 85c; 1 oz., \$3.00.

#### NAEGELIA (Temple Bells)

ANNUAL (Smithiantha hybrida)

1,500,000 S. 2-3 weeks 65-75°

• Art Shades. Dwarf pot plants with Gloxinia-like leaves and clusters of slender, tubular flowers in shades of pink, red, yellow and orange; all with spotted throats. This showy plant requires the same culture as Gloxinias.

Tr. pkt. (about 1000 seeds), \$1.50.

#### NASTURTIUM

ANNUAL (Tropaeolum majus) 175 S. 2-3 weeks 65-75° Richly colored, long-stemmed, fragrant flowers are excellent for cutting or bedding; does best in cool climate.

DOUBLE GLEAM TYPE. Of trailing or climbing habit. Vigorous growers; fine for cutting or window boxes.

- Golden Gleam. Rich, golden yellow.
- Scarlet Gleam. A brilliant scarlet.
- Gleam Mixture. A complete mixture of all double varieties.

Prices above 3, each: 1 oz., 40c; 4 ozs., \$1.25; 1 lb., \$4.00.

DWARF DOUBLE TYPE. Fully as double and large as the Gleam type, but of dwarf, compact, rounded growth. 12 to 15 in. high.

#### CHERRY ROSE

Bright color. Very compact and exceptionally free flowering. 1 oz., 45c; 4 ozs., \$1.50; 1 lb., \$4.50.

Golden Globe. Golden yellow.

Scarlet Gem. Brilliant scarlet.

Mixture of all colors in this dwarf class.

Prices of above 3, each: 1 oz., 45c; 4 ozs., \$1.50; 1 lb., \$4.50.

SINGLE VARIETIES, 225 S.

Dwarf Mixture of all colors in this class. 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.00.

#### NEMESIA

ANNUAL (N. strumosa suttonii). 90,000 S. 2-3 weeks 65-75° 18 in. This large-flowered, long-stemmed strain is fine for spring cutting.

Mixture of all colors in this cut flower class. Tr. pkt., 25c; ½ oz., 60c; ½ oz., \$2.00.

NANA COMPACTA. 6 to 8 in. Ideal for combination work.

Fire King. Cerise-scarlet.

Orange Prince. Rich orange.

Triumph Mixture. A very attractive mixture with a wide range of colors.

Prices above 3, each: Tr. pkt., 35c; 1/8 oz., 75c; 1/2 oz., \$2.50.

### NEPETA (Catnip)

PERENNIAL (N. mussini) 52,000 S. 2-3 weeks 65-75

Mussini (June-flowering Catnip). 12 in. Neat bushes with light blue flowers; aromatic. Tr. pkt., 30c; ¼ oz., 90c; 1 oz., \$2.70.

WHEN PLANNING YOUR BEDDING PLANT PROGRAM, BE SURE TO INCLUDE SOME OF THE MOST POPULAR VEGETABLES. SEE PAGES 63-67.



**CRACKERJACK** This is our "Sweet Sixteen" cut flower Marigold for '58. You can offer it with confidence.

## Tall Marigolds

### **Cutting or African**

ANNUAL (Tagetes erecta). 10,000 S. 1-2 weeks 65-75° Most any grower will find a spring crop of cut-flower Marigolds quite profitable. A Jaunary or February sowing, spaced about 4x5 inches and grown single-stem, will flower April and May. The All-Double and Carnation-flowered types are most popular. but be sure to include some of the Chrysanthemum-flowered Mission Giants for their excellent novelty value.

#### "5 BEST" FOR CUTTING

- Ball Giant Orange. Similar in type to All-Double Orange but somewhat larger flowered and of a more uniform, deep, bright orange color. Ball Orig. Seed.
- ◆ All-Double Orange. This belongs to the Fistulosa or large flowered, solid quilled-petal type. Nearly 100% double. An excellent, long-stemmed cut-flower strain.
- All-Double Lemon. Identical to the above, but a clear lemon-
- Gold Improved. Odorless. The popular Carnation-flowered intense orange. Excellent for greenhouse forcing.

  Yellow Supreme. Odorless. Similar to Gold Improved but
- with flowers a rich creamy yellow.

   Five Best Cutting Mixture. Our own carefully compounded formula mixture of the foregoing varieties balanced according to their commercial value.

Prices above 6, each: Tr. pkt., 30c; 1/4 oz., 55c; 1 oz., \$1.75; 4 ozs., \$6.00.

#### OTHER CUT-FLOWER VARIETIES



CRACKERJACK

Extra large, 100% double, Carnationflowered blooms in shades of orange, gold and yellow. Much earlier and a better grower than Sunset Giants.

Tr. pkt., 40c; 1/4 oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

Guinea Gold. A Carnation-flowered golden orange; long-stemmed. Freely produces loosely-petaled, 3-inch flowers Tr. pkt., 30c; ¼ oz., 55c; 1 oz., \$1.75; 4 ozs., \$6.00.

Man-in-the-Moon. Fully double, Carnation-flowered, pale ivory-yellow. Blends well with darker colors. Tr. pkt., 30c; ¼ oz., 55c; 1 oz., \$1.75.

Odorless Carnation-Flowered Mixture. Ranges in color from deep orange to light yellow. Carnation-flowered. Tr. pkt., 30c; ½ oz., 55c; 1 oz., \$1.65; 4 ozs., \$5.50.

#### Chrysanthemum-Flowered Types

Produces almost perfect ball-shaped, Chrysanthemum-like blooms about 3 inches in diameter. Exceptionally vigorous and free branching in growth.

- Early Sunshine ALL-MARKA DISELECTION 20 in. Early and free flowering with dozens of 11/2-inch, Mum-like flowers of bright lemonyellow. Blooms continuously throughout our hot summer.

  Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.25.

  Glitters. Large, Chrysanthemum-like flowers of soft golden
- yellow on long, strong stems. Long blooming period. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

Goldsmith (Mission Giant). Light golden orange; Chrysanthemum-flowered. Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.50.

Happiness (Golden Crown). 16 in. Early and blooms very pro-

fusely with 2½-inch Mum-type flowers of rich golden yellow. Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.25.

• Mammoth Mum. The largest of this type. Light sulphur-yellow.

Tr. pkt., 40c; ¼ oz., 90c; 1 oz., \$3.00.
Yellowstone (Mission Giant). Same as above but a pleasing clear yellow. Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.50.
Mission Giant Mixture. A well balanced Chrysanthemum-flower-

Tr. pkt., 30e; 1/4 oz., 55e; 1 oz., \$1.75; 4 ozs., \$6.00.

#### Winter Flowering

• Colorado Sunshine. Double, 3- to 4-inch, butter-yellow blooms. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

Lieb's Brown and Gold. Gold and dark red. Tr. pkt., 35c; ½ oz., 80c; 1 oz., \$2.40.

#### PETITE MARIGOLDS VILWERKA SEEGION 7 All-America Winner for '58



## Dwarf Marigolds

Bedding or French

ANNUAL (Tagetes patula)

9000 S. 1-2 weeks 65-75°

These fine, uniform strains are among the most popular florist bedding plant subjects. Double varieties, such as Cupid, Spry, etc., are also valuable for combination boxes and pots. Will flower in about 8 weeks from seedling, for "pak" or flat sales.

#### "6 BEST" FOR BEDDING





10 in. Our most popular Marigold. Well known for its brightly contrasting golden yellow Anemone crest over deep rich mahogany guard petals. Dwarf and free flowering.

Tr. pkt., 30c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs., \$6.00.

- Ball Dwarf Harmony. 10 in. Similar to Spry, except for color which is bright orange rather than yellow. Very rich effective color combinationdeep maroon guard petals. Ball Orig. Seed.
- Butterball. 8 in. Most dwarf Marigold in our trials. Light butter-vellow petals tipped wine-red. Guard petals also wine-red. Compact habit.
- Lemon Drop. Dwarf, compact plants with medium small, fully double, lemon-yellow flowers. Considered by many an improvement over Yellow Pygmy.
- Sunkist. 9 in. Uniformly dwarf and compact with solid, deep golden orange, Anemone type flowers about an inch in diameter.
- Rusty Red. 13 in. Large, rust-red, fully double flowers, 2 inches across, are freely borne on medium dwarf plants.
- 6 Best Dwarf Mixture. Balanced mixture of the above six. Prices above 6, each: tr. pkt., 30c; 1/4 oz., 65c; 1 oz., \$2.00; 4 ozs., \$6.00.

#### • PETITE

(New-All-America Winner for 1958). An extra dwarf strain of Marigolds with plants so dense and free flowering that the foliage is scarcely visible. Its extra early blooming habit makes it ideal for Market-Pak or flat sales. Grows about 6 in. tall and 10 in. wide.

Petite Orange. Fully double, bright orange flowers.

Petite Yellow. A clear, strong yellow; fully double.

Petite Gold. Between Orange and Yellow in color.

Petite Harmony. Golden anemone crest with deep mahogany guard petals; completely double.



PETITE MIXTURE. All of the above varieties blended by formula.

Prices above 5, each: tr. pkt., 70c; ½ oz., \$1.25; ¼ oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$20.00.

#### CUPIDS

A combination of large flowers and dwarf habit, an entirely dif-ferent dwarf Marigold. Extremely uniform, these compact, odorless, bushy plants produce 21/2-inch Mum-like blooms.

• Cupid Orange. Bright orange.

 Cupid Yellow. Bright creamy yellow. Cupid Gold. Midway between Cupid Yellow and Orange in color.



#### ● CUPID MIXTURE

Formula mixture of above 3 colors. Ideal for edging or combination planting. Cupids reach 10 in. in open beds, but will bloom at a height of 4 to 6 in. in 3-in. pots.

Prices above 4, each: tr. pkt., 50c; ½ oz., 90c; ½ oz., \$1.75; 1 oz., \$5.00.



MARIGOLD, COLOR MAGIC Varies from deep mahogany-red to lemon-yellow-dwarf and free flowering. Ht., 11 in.

#### OTHER BEDDING VARIETIES—Doubles

#### OCOLOR MAGIC =

Bushy growing plants, similar to the popular Spry, but with fully double, 1½-inch flowers in rich shades of yellow and orange irregularly marked dark red. Color

changes as season progresses. Here is a Marigold which combines an excellent name, a dwarf, salable habit, and real bright "eye appeal". Should be on every bedding plant grower's list.

Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.25; 4 ozs., \$6.75.

Harmony. 14 in. Attractive Anemone type flowers; orange crest and maroon guard petals.

Pot O' Gold. 15 in. Deep orange. Large flowers loosely formed with full centers and broad, overlapping petals. Flowers continuously in warmest weather.

Primrose. 12 in. Dwarf plants with fully double flowers an inch in diameter. Color is a rich golden yellow.

• Scarlet Glow. 12 in. Bright bronzy red, double flowers 11/2 to 2 inches across are borne on dwarf plants.

Tangerine. 13 in. 2-in. double flowers of bright tangerine-orange.

• Yellow Pygmy. 10 in. Excellent very free flowering dwarf Marigold, 6 to 8 in. Double lemon-yellow and nearly 100% true.

Dwarf French Double Mixture. 12 in. Medium dwarf sorts.

Harmony Mixture. 14 in. A good mixture of double bicolors.

Prices above 8, each: tr. pkt., 30c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs., \$6.00.

#### Single Varieties

- Naughty Marietta. 16 in. Semi-dwarf, bushy plants with finely netted leaves. Freely produces 2-inch, single, golden yellow flowers, each with an attractive dark red eye.
- Flash. 14 in. Mahogany flowers with golden yellow margins. Red Head. 12 in. Anemone-flowered. Orange crest, tipped maroon, and copper-red to mahogany guard petals. Sunny. Similar to Naughty Marietta, but clear yellow.

Prices above 4, each: tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$1.80; 4 ozs., \$5.40.

#### DWARF BUSH

- Ursula. Dense, rounded, free flowering plants with fine, lacy foliage. Small, golden yellow flowers.
- Lulu. Same as above, but flowers are lemon-yellow. Prices above 2, each: tr. pkt., 40c; \( \frac{1}{4} \) oz., \$1.20; \( 1 \) oz., \$3.60.



#### NICOTIANA (Flowering Tobacco)

ANNUAL (N. species) S. See below 1-2 weeks 65-75° Showy plants with a pleasing evening fragrance.

Orange Blossom (Suaveolens). 210,000 S. 18 in. A dwarf and compact small-flowered white.

Tr. pkt., 30c; ½6 oz., 85c; ¼ oz., \$2.50.

AFFINIS. 400,000 S.

Crimson Bedder. 15 in. Compact, very free flowering. Deep crimson-red. Tr. pkt., 30c; ¼ oz., 60c; 1 oz., \$2.00.

White. 3 ft. Large-flowered. Tr. pkt., 20c; ½ oz., 40c; 1 oz., \$1.20.

#### SENSATION MIXTURE

(Daylight Strain). 2 ft. The flowers of this Nicotiana have the unique feature of remaining open all day, even in brilliant sunshine. They have the same delightful evening scent as the older types, while the colors range from white through many shades of cream and pink to purple and deep crimson. Plants are bushy in habit, ideal for bedding.

Tr. pkt., 40c; ½ oz., \$1.00; 1 oz., \$3.25.

#### NIEREMBERGIA (Cup-Flower)

ANNUAL

175,000 S. 2-3 weeks 65-75°

#### • PURPLE ROBE =

6 in. This is a wonderful bedding or edging plant. The 1-inch deep violet-blue flowers are lavishly produced on dwarf plants throughout the summer. Retains its brilliance even under strong sunlight. Sow several weeks before most bedding plants to get early flowering. Tr. pkt., 50c; ½2 oz., \$1.75; ½6 oz., \$3.25; ¼ oz., \$9.75.

#### **NIGELLA**

ANNUAL (N. damascena) 11,000 S. 2-3 weeks 65-75° Miss Jekyll (Love-in-a-Mist), 18 in. Attractive blue flowers; lacy foliage. Tr. pkt., 30c; 1 oz., \$1.20.

#### PEPPER, CHRISTMAS



#### **OENOTHERA**

PERENNIAL (O. species) 350,000 S. 2-3 weeks 65-75° Shows sun loving plants with large flowers.

Youngi (Sundrop). 18 in. Large yellow blooms. Tr. pkt., 30c; ¼ oz., \$1.00; 1 oz., \$3.00.

Missouriensis. 12 in. Large-flowered yellow. Tr. pkt., 35c; ¼ oz., \$1.75; 1 oz., \$5.25.

Painted Daisy. See Pyrethrum, page 50.

#### PANSY

See pages 36 and 37.

#### PASSIFLORA (Passion Flower)

ANNUAL (P. caerulea grandiflora) 3600 S. 2-4 weeks 65° Caerulea. Greenhouse climber with large pale pink flowers surmounted by a purple and white crown.

Tr. pkt., 40c; ½ oz., 90c; ½ oz., \$1.65; 1 oz., \$5.00.

#### **PENTSTEMON** (Beard Tongue)

ANNUAL (P. gloxinioides) 55,000 S. 2-3 weeks 65-75°
Sensation Mixture. 2 ft. Attractive bell-shaped flowers produced on good spikes in an exceptional range of colors. Much used

for bedding or in borders. Used as an annual or perennial. Tr. pkt., 40c; ½ oz., \$1.00; 1 oz., \$3.25.

#### PERENNIAL

(Murrayanus grandiflorus) 15,000 S. 3-5 weeks 65-75°

• Avalon Mixture. 3 ft. Spikes of fine, large flowers in an extremely wide and unusual range of colors.

Tr. pkt., 40c; ½ oz., 80c; ¼ oz., \$1.50.

#### PEONY

**PERENNIAL** (Paeonia Species) 100 S. Frost germinator Garden Varieties, Mixture. Both double and single types are represented in this assortment of colors. Blooms in 3 years from seed. 100 seeds, \$2.50.

#### PEPPER, CHRISTMAS

ANNUAL (Capsicum species) 9000 S. 3-4 weeks 65-75° Very showy pot plants for the December holidy season. Sow April to July, finishing one plant in a 3- or 4-inch pot or three in a 5. Does best grown under glass throughout summer.

- Ball Christmas Pepper. Compact plants with a profusion of cone-shaped fruit that is first green, later turning purple and then red. Ball Orig. Seed. Tr. pkt., \$1.00; ½ oz., \$3.00; 1 oz., \$9.00.
- Candle Pepper (Craigi Christmas Pepper). Similar to Ball Christmas Pepper, but the plants are smaller leaved. Small fruit, very freely produced well above the foliage, turns from white to brilliant red.

  Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.75.

Red Fangs. One inch slender fruits, which turn directly from green to red, are borne in clusters. Well adapted for Christmas use. *Ball Orig. Seed.* Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.75.

See also Cherries, Christmas, page 15; Love Apple, page 30.

#### **PETUNIAS**

See pages 38-47.

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#### • PHLOX, TWINKLE

ALI-AMERICA A SELECTION / (All-America Winner, 1957). Pictured above. Dainty flowers of the Cuspidata or starred type, with pointed petals,

are lavishly produced on dwarf, compact plants. An unusually wide assortment of colors, both solid and bicolor, are included in this blend. Blooms very early in flats and continues well into the summer. Tr. pkt., 75c; 1/8 oz., \$1.30; 1/4 oz., \$2.35; 1 oz., \$7.00.

## Phlox

ANNUAL (P. Drummondi)

14,000 S. 2-3 weeks 65-75°

Annual Phlox are among our most showy bedding items and more popular today than ever before. This is one of the few widely grown native American flowers—was discovered by an Englishman named Drummond in 1835 on the plains of Texas. It stands heat well and rivals Petunias for showiness, having the added advantage of a more dwarf, neat habit (Nana Compacta Global types) than most Petunias.

GRANDIFLORA. 15 to 18 in. Fine, free flowering bedding and border material. Also nice for cutting.

Chamois Rose. Light creamy pink with white center.

Coccinea. Crimson-red.

Rosea. Medium rose-pink.

Violet. Try this with white or yellow.

White. A clear, even white.

Prices above 5, each: tr. pkt., 40c; 1/4 oz., 80c; 1 oz., \$2.50.

• Special Mixture of all colors in this tall class. Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00.

Cuspidata Mixture (Star of Quedlinburg). A mixture of star-shaped flowers. Tr. pkt., 35c; 1/4 oz., 80c; 1 oz., \$3.00.

GRANDIFLORA GIGANTEA. Somewhat stronger growth and larger flowered than the regular Grandifloras.

• Art Shades Mixture. Mixture of pastel shades; white eyes. Tr. pkt., 45c; ¼ oz., \$1.10; 1 oz., \$3.30.

NANA COMPACTA. 6 to 8 in. Of dwarf, compact growth, fine for low bedding and border work.

• Fireball (Scarlet) Violet Salmon-Rose Snowball (White) Sky-Blue Apricot Prices above 6, each: tr. pkt., 45c; ½ oz., \$1.10; 1 oz., \$3.30.

• Mixture. Dwarf mix. Tr. pkt., 35c; ½ oz., \$1.00; 1 oz., \$3.00.

• Ideal Bedding Mixture. (Masterblend). 6 to 8 in. This florist strain is exceptionally uniform in its dwarf habit. An unusually bright mixture well adapted for pot and combination work or for borders. Tr. pkt., 75c; ¼ oz., \$2.00; ½ oz., \$3.50; 1 oz., \$6.00.

Beauty Mixture (Sutton's). A compact and very free flowering strain with large blooms. Excellent for pot plants, combinations or bedding. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

## PERENNIAL PHLOX

PERENNIAL (P. paniculata) 2500 S. 3-4 weeks 65-75° Hardy Phlox should be sown outside in late fall to germinate in spring, or sown and refrigerated for about one month.

Beltsville Beauty. 3 ft. A greatly improved perennial Phlox. Large-flowered, and a wide assortment of colors. Tr. pkt., 85c; 1/4 oz., \$2.50; 1 oz., \$7.50.

Decussata Mixture. 3 ft. Our strain of this popular perennial Phlox contains many large-flowered, brilliantly colored types. Tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.50.



#### • GLOBE MIXTURE

8 in. ALL-AMERICA A SELECTION The best of the dwarf Phlox types. Many bedding plant growers are now using Globe exclusively for mixed dwarf Phlox. Reason: beauti-

fully rounded superior plant habit. Tr. pkt., 50c; ½ oz., \$1.50; ½ oz., \$2.65; 1 oz., \$8.00.



Gro. g. Ball



**BALL 4 ACES FORMULA MIXTURE** 

## Profitable Pansies

ANNUAL (Viola tricolor)

20,000 S. 2-3 weeks 65-75°

Pansies, along with Petunias, comprise today's two most popular seed grown bedding subjects. Be sure to have plenty of plants to meet this demand. There are two basic schedules for growing Pansies for bedding plant sales:

Mid-winter Sowing in December or January. After they have germinated carry them along as cool as possible till spring-transplant them into frames in March (Chicago latitude) for May sales. One prominent Illinois grower sows early December, transplants

## FOUR ACES FORMULA MIXTURE

Recognizing that each of the several Pansy specialist's strains possesses some important advantage, we have formulated this special mixture which, properly handled, should be an ideal Pansy strain. This mixture includes seed of the originator's Roggli Giants with their deep, bright shades and compact habit; Steele's Jumbo for early blooms; Canadian Giants with their exceptional flower size; and Ball Giant Mixture to complete a full, well rounded color

Grown slowly and cool, the slight variations in habit of growth of these strains will not be found objectionable. Each of your Pansy customers will find his favorite strain in this mixture plus qualities imparted by the other topnotch Pansies. Here is a Pansy mixture that you can promote with complete confidence. Special note: sow thin and transplant all normal seedlings; otherwise, as in any other mixture, color balance is lost. A Ball Origination. Tr. pkt., \$1.00; ½ oz., \$2.75; ¼ oz., \$5.00; 1 oz., \$15.00.

• Canadian Giants. This selection from Maple Leaf Giants is extra large flowered. Tr. pkt., \$1.00; ½ oz., \$1.85; ¼ oz., \$3.30; 1 oz., \$11.00.

30 to a "half flat", and carries them in a cold house 35-40° till March 1. Then he sets them out in frames where they start to bloom early May and are sold for \$1.50 per flat. Where smaller quantities (6 to 12 plants) are wanted, Market-Paks are ideal.

Summer Sowing. (Early August). This is the most popular time for establishing plants which are spaced about 4x6 in. in frames, given some protection over winter—loose straw, perhaps. Plants should be well established before winter sets in—even budded so that blooms will be available early in the spring to help sell the plants.

#### "FOUR BEST"

#### • BALL GIANT MIXTURE =

This is our finest and most popular bedding Pansy mixture. We blend this ourselves, using the best available strains of Swiss Giants, adding separate varieties to insure a good balance of colors. Ball Orig. Seed.

Tr. pkt., 85c; ½ oz., \$1.65; ¼ oz., \$3.00; 1 oz., \$10.00; 4 ozs., \$36.00.

- Roggli Giant Elite Mixture. A choice Swiss bedding strain, predominating in rich red and bronze shades with the typical large, deep blotches. The finest large flowered Pansy. We supply originator's imported seed only. Tr. pkt., \$1.50; ½ oz., \$3.75; ¼ oz., \$7.00; 1 oz., \$22.00.
- Steele's Jumbo Mixture. We handle the originator's seed of this popular American strain. Tr. pkt., \$1.15; ½ oz., \$3.40; ¼ oz., \$6.10; ½ oz., \$10.35; 1 oz., \$16.55.

## **Pansies**

America. An exceptionally free flowering mixture with medium sized blooms. Dwarf and extra early. Tr. pkt., 65c; 1/4 oz., \$2.75; 1 oz., \$10.00.

• Ball Dwarf Giants Mixture. A fine Swiss Giant strain selected for dwarf and compact habit. Ball Orig. Seed.

pkt., 65c; 1/8 oz., \$1.40; 1/4 oz., \$2.75; 1 oz., \$9.00; 4 ozs., \$32.00.

Ball Winter Flowering. Our greatly improved strain of this tall winter cut-flower variety. At its best from a late summer sowing-not for bedding ½ tr. pkt., 65c; tr. pkt., \$1.10; ½ oz., \$2.75; ½ oz., \$5.00.

Butterfly Mixture. Ruffled 2½- to 3-in. flowers, including unusual apricot, terra cotta and rosy orchid shades, are freely produced on vigorous plants. Originator's seed only. Tr. pkt., \$1.00; ½ oz., \$2.90; ¼ oz., \$5.20;

½ oz., \$9.40.

#### CLEAR CRYSTALS

(New). Pictured at right. A sparkling mixture of red, purple, orange, lilac, yellow, blue and white colors—all without dark blotches. Flowers are slightly ruffled and nearly as large as the Swiss Giants. Excellent for buyers who dislike blotched Pansies. Tr. pkt., \$1.00; ¼ oz., \$2.50; 1 oz., \$7.50.

• Color Carnival. A remarkable American produced strain of Swiss Giants. Our trials indicate that it is quite similar to the best imported Roggli strain.

Large flowers in a superb mixture of colors. Tr. pkt., \$1.50; ½ oz., \$3.75; ¼ oz., \$7.00; 1 oz., \$22.00.

• Englemann's Giant Mixture. A large flowered and brightly colored strain, many being penciled or veined. Fairly compact growth. We offer originator's seed only.

Tr. pkt., \$1.00; ½ oz., \$3.30; ¼ oz., \$6.00; 1 oz., \$18.00. • Felix. Uniformly true to type, with well ruffled flowers of good size carried on fairly dwarf plants. Colors are rich and unusual, each flower being marked with the dark "whiskers" characteristic of this strain. Ball Orig. Seed.

Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00.

Improved Swiss Giants. Predominates in rich bronze and red shades. Tr. pkt., 65c; 1/4 oz., \$2.75; 1 oz., \$9.00.

Maple Leaf Giants. An excellent, extra large flowered strain. Heavy growth with good stems.

Tr. pkt., 65c;  $\frac{1}{8}$  oz., 1.65;  $\frac{1}{4}$  oz., 3.00; 1 oz., 10.00.



CLEAR CRYSTALS (New)

"101" Giant Mixture. A choice bedding and basket Pansy of the "English" type. Large flowers in a wide color range on compact plants

Tr. pkt., 90c; ½ oz., \$2.75; ¼ oz., \$5.00; 1 oz., \$15.00. Oregon Giants. A complete mixture of long-stemmed, large flowered Giant Ruffled Pansies. Originator's seed. 200 seeds, 50c; 600 seeds, \$1.25; ½ oz., \$4.00; 1 oz., \$12.00.

Ruffled Rainbow. An unusually uniform dwarf mixture characterized by medium large flowers with distinctly ruffled petals and a wide range of colors.

Tr. pkt., \$1.00; ½ oz., \$2.75; ¼ oz., \$5.00; 1 oz., \$15.00. • Tigress. "Miniature Pansies". Reds, yellows, orchids and purples in novel striped and blotched arrangements of at least 3

colors create a striking appearance. Tr. pkt., 50c; ¼ oz., \$1.75; 1 oz., \$5.00.

## SEPARATE COLORS

Alpenglow. Mahogany-red with dark center.

Berna. Dark velvety blue. • Coronation Gold. The finest, clear golden yellow.

Delft Blue. Porcelain-blue. Firebeacon. Bright, flaming orange with dark center.

Giant Orange. Light orange.

Jet Black. 80% of the flowers are a true black throughout the spring, the purple undertone not becoming apparent until hot weather. Unusual grown with white Pansies.

Lake of Thun. Large-flowered blue with darker center.

Mont Blanc. Ivory-white with small yellow eye.

Raspberry Rose. Soft pink with contrasting velvety blotch. Redwing. Red and yellow petals, darker center. Rhinegold. Large-flowered yellow with dark center.

• True Blue. Solid mid-blue without blotch. Prices above 13, each:

Tr. pkt., 80c; ½ oz., \$2.00; ¼ oz., \$3.50; 1 oz., \$11.00. Pay Dirt. Large yellow with black lines. Originator's seed. ¼ oz., \$3.35; ½ oz., \$6.05; ¼ oz., \$10.90.

• Paper White. Pure white with small yellow eye. Blue Butterfly. Blue and white. Improved Lord Beaconsfield. Redskin. Solid dark red. Prices above 3, each:

Tr. pkt., \$1.00; ½ oz., \$2.75; ½ oz., \$5.00; 1 oz., \$15.00.

#### Originator's Separate Colors

For flower size, uniformity of color and habit, these Originatorgrown Swiss Giant Pansies are the finest separate color Pansies available.

• Eiger (Rhinegold).

• Hohenfeuer (Firebeacon). Blumlisalp (Raspberry Rose). Berna, Originator's.

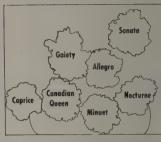
Alpengluhn (Alpenglow). Jungfrau. White. Monch (Coronation Gold). Thunersee (Lake of Thun).

• Roggli Giant Elite Mixture (See 4 Best, opposite page).

• Roggli Straight Color Mixture. Our own mixture of the above Roggli separate colors, blended by formula. Prices above 10 varieties, each:

Tr. pkt., \$1.50; \( \frac{1}{8} \) oz., \$3.75; \( \frac{1}{4} \) oz., \$7.00; \( 1 \) oz., \$22.00.





Here are representative blooms of the 6 fastest selling solid colors plus the popular variegated rose and white Gaiety. See diagram above for

ALL VARIETIES LISTED ON THESE TWO PAGES ARE (E) HYDRID PETUNIAS

## Versatile Double Petunias FOR BEDDING, POTS, OR COMBINATIONS

ANNUAL (P. hybrida) All Petunia seed averages about 285,000 per ounce. 1-2 weeks 65-75°

Double Petunias are among your most versatile spring plants.

- Many are bought in "paks" and flats by the bedding plant trade. Growers find that six plants in a Market-Pak No. 42 and twelve plants in a Market-Pak No. 60 both make quality units for ready
- Doubles in 21/4-in, and 3-in, pots for bedding continue to be popular. Jiffy-Pots give superior quality plants and bring satisfied customers back for more. Having the first flower open also helps your sales.
- In 3- and 4-inch pots, double Petunias provide the backbone for May combinations.
- Heavy, flowering doubles in 3-, 4- and 5-inch pots are in good demand for Mother's Day.
- For budget sales in March and April, blooming plants in 3-inch pots have met excellent response.

We offer the finest strains of Double Petunias obtainable. Our recommendations are based on complete trials, both in 3-inch pots for spring blooming in our greenhouse, and in our field trials for summer performance.

#### **CULTURAL SUGGESTIONS**

CULTURAL SUGGESTIONS

Doubles must be some earlier than ordinary Petunias to sell at the same time. For "paks" or flats sow from 12 to 15 weeks before sale, depending on what your market demands. We recommend (Chicago, 50°) January 1 sowing for strong 3-inch in late May. For May combinations, heavy 3-inch should be sown December 15—no later. For 4- or 5-inch for April and May potted plant sales or 3-inch for March, a well shaped plant with several blooms needs a November 15 sowing. Doubles, like other Petunias, need good drainage, and cool temperatures—they will lose their dwarf habit of growth if temperatures are run above 55° lunless there is an abundance of sunshine to offset this). Certain varieties need one pinch to retain suitable shape for finished plants. They all break very readily. Sonata, Snowball and Minuet are especially responsive to a pinch.

## CANADIAN STRAINS MIXTURES



#### BALL ALL-DOUBLE MIXTURE

Our top quality, all-purpose double mixture, containing liberal portions of the most popular straight colors blended by formula with our well known, large-flower-

ed Canadian strains. Varieties contained in this mixture are selected for uniformity of height and blooming date. All important double Petunia colors are represented in this strain. Our finest double mixture.  $\frac{1}{2}$  tr. pkt., \$2.50; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$7.60;  $\frac{1}{64}$  oz., \$14.45;  $\frac{1}{32}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

• Canadian Mixture, Improved. Basically improved by the addition of more fine rose, pink and salmon shades.  $\frac{1}{2}$  tr. pkt., \$2.50; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$7.60;  $\frac{1}{164}$  oz., \$14.45;  $\frac{1}{32}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

Colossal Shades of Rose, Imp. The largest flowered All-Double Petunia. Shades of pink and salmon-rose. ½ tr. pkt., \$2.50; tr. pkt., \$4.00; ½28 oz., \$7.60; ½4 oz., \$14.45;  $\frac{1}{32}$  oz., \$28.00;  $\frac{1}{16}$  oz., \$55.00.

#### SEPARATE COLORS

• Canadian Queen. Pictured in arrangement, above. A very fine, true pink double, somewhat lighter than Rose of Canada. The large, well ruffled flowers are carried nicely above the compact, bushy plants. A first class, all-around double Petunia.  $\frac{1}{2}$  tr. pkt., \$2.50; tr. pkt., \$4.00;  $\frac{1}{2}$  oz., \$7.60;  $\frac{1}{6}$  oz., \$14.45;  $\frac{1}{3}$  oz., \$28.00;  $\frac{1}{6}$  oz., \$55.00.

## Double Petunias

## CANADIAN STRAINS Continued

America. Medium sized bright rose flowers very freely produced on a medium tall plant. If pinched once will produce a very nice pot plant.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{16}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$14.50;  $\frac{1}{16}$  oz., \$28.00;  $\frac{1}{8}$  oz., \$55.00.

• Cotton Candy. (Pictured below), An appealing soft creamy salmon suffused with pink, reminiscent of the childhood treat from which it derives its name. Extra large, fully double flowers borne in abundance on vigorous but dense plants. Fine for pots or bedding.

Black Prince. A bright burgundy-wine color. Flowers are only medium in size, but freely produced.

Northern Lights. Shades of medium deep rose with some bicolored types. Typical fine Canadian habit of growth.

Rose of Canada. Fully double, bright medium rose flowers about 3 inches across are freely produced on compact, bushy plants.

Prices above 4, each: ½ tr. pkt., \$2.50; tr. pkt., \$4.00; ½ oz., \$7.60; ½ oz., \$14.45; ½ oz., \$28.00; ¼ oz., \$55.00.

• Burpee Orchid (Not a Canadian variety). Improves Minuet mainly in its somewhat warmer, rose-lavender shade. Should be pinched for best plant habit.

½ tr. pkt., \$2.75; tr. pkt., \$4.50; ½28 oz., \$8.50; ½4 oz.,

## PAN-AMERICAN STRAINS

(Pictured above, right.) Medium to large, fully double flowers of clear, bright salmon are carried on fairly dwarf plants. An attractive color in the All-Doubles and the finest in its color class.  $\frac{1}{2}$  tr. pkt., \$2.75; tr. pkt., \$4.50;  $\frac{1}{2}$  oz., \$8.50;  $\frac{1}{6}$  oz., \$16.00;  $\frac{1}{6}$  oz., \$29.50;  $\frac{1}{6}$  oz., 58.00.

• Caprice. (Pictured in arrangement on opposite page.) Medium sized rose-pink flowers are carried on fairly dwarf plants. One of the best rose doubles available. ½ tr. pkt., \$2.75; tr. pkt., \$4.50;  $\frac{1}{128}$  oz., \$8.50;  $\frac{1}{64}$  oz., \$16.00;  $\frac{1}{32}$  oz., \$29.50;  $\frac{1}{16}$  oz., \$58.00.





ALLEGRO Ever-increasing in popularity because of its deep, bright, salmon color-pleasant and distinctive among doubles.

• Sonata. (Pictured in arrangement on opposite page.) Extra large, fully double, pure white flowers. Should be pinched to encourage best plant habit.

Minuet. (Pictured in arrangement on opposite page.) Medium sized lavender. Tall; should be pinched.

Nocturne. Elk's Pride purple, medium large flowers are borne on vigorous, but compact plants.

Prices above 3, each:  $\frac{1}{2}$  tr. pkt., \$2.75; tr. pkt., \$4.50;  $\frac{1}{128}$  oz., \$8.50;  $\frac{1}{6}$  oz., \$16.00;  $\frac{1}{82}$  oz., \$29.50;  $\frac{1}{6}$  oz.,

Glorious Mixture. Contains all Pan-American colors. In transplanting, be sure to use both large and small seedlings thus insuring a complete range of colors.  $\frac{1}{2}$  tr. pkt., \$2.25; tr. pkt., \$4.00;  $\frac{1}{2}$  oz., \$7.60;  $\frac{1}{6}$  oz., \$14.45;  $\frac{1}{3}$ 2 oz., \$28.00;  $\frac{1}{4}$ 6 oz., \$55.00.

## JAPANESE (Victorious) STRAINS

- Gaiety. (Pictured in arrangement on opposite page.) The blotched or variegated flowers combine bright rose-pink with contrasting pure white to produce a "Strawberries and cream" effect. The blooms are medium large, well doubled and fringed, and are carried on dwarf, base-branching plants—qualities which go to make an excellent Petunia for pots or bedding. The most popular Japanese variety.
- Attraction. Striking, brightly colored rose and white mottled; deeper than Gaiety. Medium habit.
- Pink Perfection (World Beauty). Deep rose color and uniformly dwarf growth.

White Swan (Snowball Imp.) This pure white double improves the original Snowball in flower size and habit of growth.

Blue Monarch. (An improved Blue Brocade.) Purple. Prefer Nocturne.

Sunset Giant. A bright salmon-scarlet double of Japanese origin. Quite similar, in our trials, to Allegro, but may show slight differences elsewhere.

Victorious Mixture. We blend this mixture ourselves from the above Japanese varieties.

Prices above 7, each:  $\frac{1}{2}$  tr. pkt., \$2.25; tr. pkt., \$4.00;  $\frac{1}{128}$  oz., \$6.50;  $\frac{1}{6}$  oz., \$12.00;  $\frac{1}{32}$  oz., \$22.00;  $\frac{1}{16}$  oz., \$40.00.





# F. Hybrid Grandiflora Petunias

SWEET SIXTEEN PETUNIAS

These 8 varieties are featured varieties in our Sweet Sixteen promotion—be sure to have some of each to offer your bed-

ding plant customers. All of them are pictured in color on our Sweet Sixteen Petunia poster which will be mailed to our

bedding plant customers in early January. A separate Pink Magic poster and a poster showing Blue Lustre and Blue

Ribbon (see page 45) will be included in our Sweet Sixteen kit which is aimed at helping you sell more bedding plants.

What Are F. Hybrids?

Here's how an F1 Hybrid is produced. Two parent strains are isolated and self-pollinated for several generations until they come true to type. Then they are artificially crossed to produce the hybrid. Each time more of the hybrid is wanted, the same two parent strains must be crossed again. It is only the "first generation" or "F1" that has the uniform, vigorous growth we want-hence the popularity of F1 Hybrids.

### Advantages of F1 Hybrids

• Greater vigor. Fast, strong growth is greatest single advantage of F1 Hybrids. More plant quicker-more blooms.

### PINK MAGIC

Almost identical to White Magic except for its smooth, bright pink color without objectionable veining. Makes an excellent, dwarf pot plant for combination use, and is equal-

ly good for bedding. Ball Orig. Seed. ½ tr. pkt., \$1.35; tr. pkt., \$2.50; ½28 oz., \$4.50; 1/64 oz., \$8.00; 1/62 oz., \$15.50; 1/16 oz., \$30.00; 1/8 oz., \$57.00; 1/4 oz., \$108.00. • New colors are possible from special parent combinations.

• Uniform plants come with F1 Hybrid seed. However, if you try to save seed from F1 plants for the next season, you will lose the uniformity, and the desirable colors as well.

Considering the low percentage of seed cost compared to your total receipts for bedding plants, you can afford only the best. Sturdier, larger, more vigorous plants, greater uniformity, plus unique new colors combine to make an unbeatable combination to offer your customers.

#### • WHITE MAGIC

Earliness, large ruffled Grandiflora blooms of pure white, heavy production of flowers and dwarf habit of growth are shared in this re-

markable Petunia. Ideal either in pots or for bedding. Ball Orig. Seed.

½ tr. pkt., \$1.35; tr. pkt., \$2.50; ½28 oz., \$4.50; ½4 oz., \$8.00; ½2 oz., \$15.50; ½6 oz., \$30.00; ½ oz., \$57.00; ¼ oz., \$108.00.



WHITE MAGIC

color well under summer sun.

• BALLERINA



(New-A Ball Origination). Medium large, ruffled, Grandiflora blooms of the popular, mahogany-red King Henry or Velvet Ball color. Makes a

New). This is, without a doubt, the

finest clear violet-blue Petunia thus

far. The medium large ruffled Grandi-

flora blooms are produced more freely

rich bedding show planted with white. ½ tr. pkt., \$1.35; tr. pkt., \$2.50; ½<sub>128</sub> oz., \$4.50; ½<sub>64</sub> oz., \$8.00; ½<sub>32</sub> oz., \$15.50; ½<sub>16</sub> oz., \$30.00;  $\frac{1}{8}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.

• BLUE LUSTRE 3

than most blue Petunias, while the plant habit is uni-

form and bushy. ½ tr. pkt., \$1.75; tr. pkt., \$3.00; ½28 oz., \$5.50; ½4 oz., \$10.00; ½2 oz., \$19.00;

• MATADOR

# For further information on our Sweet Sixteen kit, see inside front cover and page 1.

## • MAYTIME

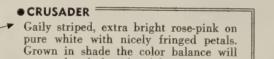
VILLAMERICA OSELECTION / (New-All-America Winner for 1958). This excellent F<sub>1</sub> Hybrid covers itself with large, ruffled Grandiflora type flowers of a soft salmon-pink shade. Blooms

are freely produced on dense, vigorous plants. A needed color in the Grandiflora class.  $\frac{1}{2}$  tr. pkt., \$1.75; tr. pkt., \$3.00;  $\frac{1}{128}$  oz., \$5.50;  $\frac{1}{64}$  oz., \$10.00;  $\frac{1}{32}$  oz., \$19.00;



pure white with nicely fringed petals. go to the dark side. Adverse cultural

conditions seem to cause them to become lighter, but restoration of normal cultural conditions restores normal color. ½ tr. pkt., \$1.35; tr. pkt., \$2.50; ½28 oz., \$4.50;



 $\frac{1}{64}$  oz., \$8.00;  $\frac{1}{32}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{8}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.



## • TANGO

bushy plant with luxurious deep green foliage against which the large, bright salmon-scarlet flowers literally stand out like flares. Flowers are moderately fringed

ALL-AMERICA DISELECTION | Extra large, frilled flowers

of clear, intense salmon that hold their

and ruffled, and are freely produced. Makes a fine pot plant and is equally good for bedding.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{128}$  oz., \$8.00;  $\frac{1}{128}$  oz., \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{8}$  oz., \$57.00;  $\frac{1}{4}$  oz., \$108.00.













Gro. g. Ball

## F Hybrid Grandifloras - Continued

Bolero. Compact, medium rose fringed. Prefer and recommend Prima Donna.

Fire Dance. ALEMENCA THETTON. This can best be described as a tango-red with a rich golden throat which extends throughout and underlies the red of the petals. Fire Dance is a large fringed Grandiflora and is quite free flowering.

• Jumbo Rose. Extra large flowered, ruffled deep rose. This is a fine Petunia for pots and combinations, with flowers as large as Popcorn; a good bedding variety, too. Ball Orig. Seed.

• La Paloma. Large, well fringed flowers of purest white with yellow throat and remarkable vigor are the outstanding points

about this fine Hybrid Petunia.

• Prima Donna. WEMERGE THEFORY Large, heavily ruffled bright rose flowers with darker veins on vigorous, spreading, base-branching plants. Quite similar to the popular Ballerina except for color. Lavender Lace (New). Heavily fringed, Grandiflora type flowers of warm lavender-rose with deeper heliotrope veins. Makes an excellent 3-inch pot plant for combinations. Equally good for bedding.

#### GRANDIFLORA MIXTURE

Enough good  $F_1$  Hybrid Grandiflora Petunia varieties are now available to enable us to offer this carefully blended formula mixture which we make up ourselves. Contains both fringed and ruffled types.

Prices above 7, each:  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{4}$ 2s oz., \$4.50;  $\frac{1}{4}$ 6 oz., \$8.00;  $\frac{1}{4}$ 2 oz., \$15.50;  $\frac{1}{4}$ 6 oz., \$30.00;  $\frac{1}{8}$ 8 oz., \$57.00;  $\frac{1}{4}$ 6 oz., \$108.00.

- Blue Mantle. Medium sized, ruffled flowers of rich violet-blue. Fairly dwarf but erect plant with blooms well displayed. A good bedder, but especially nice for pots.
- Fairyland. Medium large fringed and ruffled flowers of a soft shrimp-salmon shade; lighter than Ballerina. Vigorous and free blooming.
- Fire Gleam. Medium sized, ruffled flowers of brilliant, creamy, cherry-red—a color that almost seems to glow as if lighted.
- Flirt. Medium sized, clear light pink flowers are freely produced on vigorous but fairly compact plants.

Minstrel. Large, ruffled flowers in various combinations of white and rich violet-blue.

Snow Lady. A medium large, fringed and ruffled white somewhat similar to La Paloma.

Prices above 6, each:  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{128}$  oz., \$3.50;  $\frac{1}{46}$  oz., \$6.50;  $\frac{1}{32}$  oz., \$12.00;  $\frac{1}{16}$  oz., \$20.00;  $\frac{1}{36}$  oz., \$36.00;  $\frac{1}{4}$  oz., \$65.00.

#### (F) HYBRID GRANDIFLORA COLLECTION =

One tr. pkt. each of Pink Magic, White Magic, Blue Lustre, Tango, Ballerina, and Crusader (catalog value \$15.50) for \$14.00.



**RUFFLED VARIETIES** 

#### Large-Flowered Petunias

There are 3 distinct classes of Grandifloras: the Ruffled, the Fringed, and the Dwarf. Like all Inbred Petunias, the most vigorous are the tall ones. The Dwarf Grandifloras make ideal pot plants, but for bedding use the F<sub>1</sub> Hybrids are generally more satisfactory.

· BINGO

(New — A Ball Origination pictured at left.) Huge flowers, up to 5

inches across, richly variegated winered and white are carried on vigorous plants. About half of the plants are somewhat smaller flowered (3 inches), but are equally colorful. An excellent item for combination boxes or bedding.

or bedding.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{2}$  soz., \$3.50;  $\frac{1}{2}$ 4 oz., \$6.50;  $\frac{1}{2}$ 5 oz., \$11.70;  $\frac{1}{2}$ 6 oz., \$20.00;  $\frac{1}{2}$ 8 oz., \$35.00;  $\frac{1}{2}$ 4 oz., \$60.00.

BINGO

## Other Grandifloras

### RUFFLED VARIETIES. Continued

• POPCORN

A Super-Dwarf Grandiflora White. If you like Snowstorm or White Queen for flower size, but find it a bit tall for certain uses, here is the answer-a really dwarf, large flowered white. Makes a wonderful plant for pots or combinations, and is equally at home for bedding. Tr. pkt., \$1.50;  $\frac{1}{164}$  oz., \$2.75;  $\frac{1}{162}$  oz., \$5.00;  $\frac{1}{16}$  oz., \$9.50;  $\frac{1}{18}$  oz., \$18.00;  $\frac{1}{14}$  oz., \$33.00.

• Carosel, Small, daintily fringed, but lavishly produced flowers of wine-purple and white, are borne on compact, shapely plants. A very popular variety. ½ tr. pkt., 85c; tr. pkt., \$1.50; ½4 oz., \$3.50; ½ oz., \$6.00.

Carnival, A colorful mixture containing all shades found in the Grandiflora type. Carnival is an entirely different type of Petunia. neither F1 Hybrid nor inbred. It is midway between the two types in vigor, F2 Petunia seed is saved from specially bred and selected  $F_1$  Hybrid varieties. Suggest you try some to determine whether it is well adapted for your use. Tr. pkt., \$1.50;  $\frac{1}{32}$  oz., \$3.85;  $\frac{1}{16}$  oz., \$7.00;  $\frac{1}{4}$  oz., \$21.00; 1 oz., \$63.00.

Purple Prince. Large, deep violet-blue flowers on vigorous plants. Tr. pkt., \$1.00;  $\frac{1}{100}$  oz., \$2.00;  $\frac{1}{100}$  oz., \$3.75;  $\frac{1}{10}$  oz., \$7.00.

Burgundy. Dark wine-red with large white throat.

Dwarf Pink Glory. Glowing carmine-rose with white throat.

• Elk's Pride Dwarf. Our strain of this always popular, rich velvety purple is admirably suited for bedding. Uniform.

Giant Flaming Velvet. Fine, ruffled, velvety mahogany-red. Same color as Velvet Ball but larger.

Royalty. Large ruffled flowers in combinations of purple and white.

• Snowstorm. Fine, large flowered white.

White Cloud. We offer the originator's strain.

• White Queen. Extra large, wavy, pure white flowers and vigorous growth make this a truly outstanding Petunia.

Prices above 8, each: Tr. pkt., 85c; 1/64 oz., \$1.90; 1/32 oz., \$3.40; ½6 oz.. \$5.75.

Summer Night. Elk's Pride color but much more bushy and compact. Blooms later than most Petunias. Tr. pkt., \$1.00;  $\frac{1}{64}$  oz., \$2.25;  $\frac{1}{32}$  oz., \$4.00;  $\frac{1}{16}$  oz., \$7.50.

• Ruffled Grandiflora Mixture. A well balanced formula mixture of above varieties in following proportions: 25% White; 25% Pink; 25% Purple; 12½% Mahogany-Red; 12½% Wine-Red. Tr. pkt., 60c;  $\frac{1}{64}$  oz., \$1.50;  $\frac{1}{32}$  oz., \$2.75;  $\frac{1}{16}$  oz., \$5.00.

### FRINGED GRANDIFLORAS

Dazzler. Free flowering, deep carmine-rose. Extra early and dwarf. A fine pot plant variety. Tr. pkt., 60c; ½4 oz., \$1.50; ½2 oz., \$2.75.

Fluffy Ruffles. An attractive fringed mixture for bedding work. Tr. pkt., 85c;  $\frac{1}{64}$  oz., \$1.90;  $\frac{1}{32}$  oz., \$3.40;  $\frac{1}{16}$  oz., \$5.75; 1/8 oz., \$10.50.

- Fringed Snowstorm. Nicely fringed, pure white flowers with faint gold throat are very freely produced. Good for either pots or bedding. ½ tr. pkt., 65c; tr. pkt., \$1.00; 1/64 oz., \$2.35;  $\frac{1}{32}$  oz., \$3.75;  $\frac{1}{16}$  oz., \$6.75.
- Theodosia Improved. Extra large, heavily fringed flowers of ½ oz., \$20.00.
- Carmencita. Makes a nice pot plant. Medium size, well fringed, bright salmon-red flowers on dwarf, compact plants. ½ tr. pkt., 85c; tr. pkt., \$1.50; \(\frac{1}{164}\) oz., \$3.50; \(\frac{1}{162}\) oz., \$6.00.
- Fringed Grandiflora Mixture. A high class mixture made up of the best named varieties in the Fringed class. Tr. pkt., 85c; ½ oz., \$1.90; ½ oz., \$3.40; ½ oz., \$5.75; ½ oz., \$10.50.



**POPCORN** 

#### **DWARF VARIETIES**

The following Petunia varieties seem admirably adapted to pot plant growth, but are not so universally useful for outdoor planting. So we have taken the liberty of listing them separately to indicate a special adaptability to growth in pots in the greenhouse in spring. Many of the Petunias listed on the preceding pages also make ideal pot plants. Check variety descriptions for our recommendations.

- Lace Veil. Fringed, pure white flowers. Our present stock of Lace Veil is quite uniform and free flowering. Tr. pkt., 85c;  $\frac{1}{64}$  oz., \$2.00;  $\frac{1}{32}$  oz., \$3.50.
- Little Giants Mixture. Small, ruffled, California Giant type flowers are freely produced on low growing, uniform plants. Ideal for pots and combination work as well as bedding. Colors range from crimson-red through rose and pink to white. Tr. pkt., 75c; ½4 oz., \$1.50; ½2 oz., \$2.75; ½6 oz., \$5.00.

Little Giants, Pink Shades. Same habit as Little Giants Mixed but in various shades of pink. Tr. pkt., \$1.00;  $\frac{1}{64}$  oz., \$1.75;  $\frac{1}{32}$  oz., \$3.00;  $\frac{1}{16}$  oz., \$5.50.

• Robin. Bred especially for use in pots or for combinations, but equally at home as a border plant. Plants are dwarf and compact, carrying their medium sized, ruffled flowers of rich, bright rose with white throats well above the foliage. Ball Orig. Seed. ½ tr. pkt., 85c; tr. pkt., \$1.50; ½ oz., \$3.50; ½ oz., \$6.00.

Salmonet. Nicely fringed flowers of luminous, clear salmon are borne profusely on dwarf plants. Salmonet is the earliest blooming Petunia on our entire list. Valuable for combinations as

well as bedding plant sales. Ball. Orig. Seed. ½ tr. pkt., 85c; tr. pkt., \$1.50; 1/64 oz., \$3.50; 1/32 oz., \$6.00.

Setting Sun. Fringed deep rose; rather restricted growth. Tr. pkt., 85c; ½4 oz., \$2.00; ½2 oz., \$3.50.

• Dwarf Grandiflora Mixture (Dwarf Erfurt). A formula mixture of Dwarf Fringed varieties, including those mentioned in the pot plant types listed above. Tr. pkt., 85c;  $\frac{1}{64}$  oz., \$2.00;  $\frac{1}{32}$  oz., \$3.50.



## Other Grandifloras



BALL DWARF GIANT No. 1

## CALIFORNIA GIANTS

Not as compact or free-blooming as most F1 Hybrid Petunias. California Giants nevertheless hold their popularity fully. Florists will "cuss it out" for this or that bad habit, then come back with just as big an order next season. It's just another example of "the customer is always right". Gardeners and gift-buyers will apparently never tire of the huge ruffled and veined blooms in their striking color combinations. For pot plants Ball Dwarf Giant No. 1 is the variety. It's the most dwarf and earliest blooming California Giant. For a different color range, on somewhat taller plants, use Ball Dwarf Giant No. 2. Other strains listed below supply various single and blended colors. Sow December 15 for heavy 3-inch plants for Mother's Day, and January 10 to produce blooming 21/4- or 3-inch for late May bedding sales.

#### BALL DWARF GIANT No. 1

Over 90% very large flowers, in orchid, rose and red shades, and bicolors. Throws its first flower very early—easy to flower in pots or "paks" for bedding. Has the most dwarf, compact growth of all California Giants. Flowers are larger than other varieties in this class, with delicately netted throats and heavily ruffled petals. This is the finest Giant Petunia for spring pots, and for bedding sales. We maintain the high standard by yearly trial and selection at West Chicago.

Separate Colors of Ball Dwarf Giant No. 1. All possess the same desirable dwarf early flowering with 90% large flowers as the Mixture above.

Rose and White Orchid Rose-Red

Prices above 4, each:  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{6}$  oz., \$2.75;  $\frac{1}{32}$  oz., \$5.00;  $\frac{1}{16}$  oz., \$9.50;  $\frac{1}{8}$  oz., \$18.00;  $\frac{1}{4}$  oz., \$34.00.

• Ball Dwarf Giant No. 2-For Bedding. Some growers prefer this strain for bedding use because it is somewhat more vigorous in growth and includes some pink and copper shades which it is impossible to breed into the extra dwarf, early blooming Ball Dwarf Giant No. 1 strain.

Ramona. Large, open throated flowers about half rose, balance pink and lavender. 95% large flowered. Bred especially for pots and combinations.

Prices above 2, each:  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{2}$ 4 oz., \$2.75;  $\frac{1}{2}$ 5 oz., \$5.00;  $\frac{1}{2}$ 6 oz., \$9.50;  $\frac{1}{2}$ 8 oz., \$18.00;  $\frac{1}{2}$ 4 oz., \$34.00.

California Giants Mixture No. 5. A very complete and attractive mixture of colors in the tall Giant class. Free flowering for bedding. Tr. pkt., 75c; 1/64 oz., \$1.35; 1/32 oz., \$2.50; 1/16 oz., \$4.50.

California Giant-Supreme Florists' Strain. Fine bedding mixture in soft shades of pink, rose and salmon. Tr. pkt., \$1.00;  $\frac{1}{64}$  oz., \$1.75;  $\frac{1}{32}$  oz., \$3.00;  $\frac{1}{16}$  oz., \$5.50. • Multibloom Mixture. Where summer heat is not too intense or prolonged, this strain is bushier and more free flowering, when used for bedding, than the regular No. 1 or No. 2 strains. Typical California Giant flower size and color range.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{6}$  oz., \$2.75;  $\frac{1}{82}$  oz., \$5.00;  $\frac{1}{16}$  oz., \$9.50;  $\frac{1}{8}$  oz., \$18.00;  $\frac{1}{4}$  oz., \$34.00.

Giant Rainbow Strain. Excellent mixture, Tr. pkt., \$1.00;  $\frac{1}{64}$  oz., \$1.85;  $\frac{1}{32}$  oz., \$3.25;  $\frac{1}{16}$  oz., \$5.75.

#### SEPARATE COLOR VARIETIES

White Giant. Pure white petals with yellow throat.

Copper-Red, Dark. Attractive deep coppery crimson.

Glamour. A beautiful rich salmon-rose.

Prices above 3, each: Tr. pkt., \$1.75; \(\frac{1}{64}\) oz., \$2.75; \(\frac{1}{32}\) oz., \$5.00.

## MISCELLANEOUS PETUNIAS

#### THE BALCONIES

Strong growers of spreading or semi-trailing habit.

Black Prince. Deep velvety crimson-red.

Royal Rose

White Crimson Blue Mixture

Prices above 6, each: tr. pkt., 40c; ½ oz., \$1.25; ½ oz., \$2.25; 1 oz., \$6.75.

#### TALL BEDDING

Taller and stronger growers than the Dwarf class.

General Dodds. Deep amaranth-red.

Howard's Star Imp. Medium tall, velvety crimson with large white star in each flower. Our strain comes quite true to the starred type.

Prices above 2, each: tr. pkt., 40c; ½ oz., \$1.25; ¼ oz., \$2.25; 1 oz., \$6.75.





#### PINK VELVET

(New-A Ball Origination). A beautiful, clear rose-pink. Identical in color and flower size to the popular Celestial Rose Imp., but more uniform in habit, color and freedom of bloom. We think you'll agree that this is

one of the best Hybrid Multifloras you've seen.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{2}$ 8 oz., \$3.50;  $\frac{1}{6}$ 9 oz., \$11.70;  $\frac{1}{6}$ 9 oz., \$20.00;  $\frac{1}{8}$ 9 oz., \$35.00; 1/4 oz., \$60.00.





#### BLUE RIBBON =

(New-A Ball Exclusive for 1958). A clear, violet-blue Multiflora Petunia identical in color to Blue Lustre. Very free flowering, and in our opinion, the finest

blue Multiflora on the market today.  $\frac{1}{2}$  tr. pkt., \$1.25; tr. pkt., \$2.25;  $\frac{1}{2}$ 8 oz., \$4.00;  $\frac{1}{6}$ 4 oz., \$7.50;  $\frac{1}{3}$ 8 oz., \$14.50;  $\frac{1}{4}$ 6 oz., \$26.00;  $\frac{1}{8}$ 8 oz., \$46.00; 4 oz., \$82.00.

## F1 Hybrid Multifloras



ALL-AMERICA SELECTION (All-America Winner for 1957). More dwarf and compact than Comanche and a bit brighter red in color. May also be more free flowering under

some growing conditions. Pictured below.  $\frac{1}{2}$  tr. pkt., \$1.25; tr. pkt., \$2.25;  $\frac{1}{28}$  oz., \$4.00;  $\frac{1}{26}$  oz., \$7.50;  $\frac{1}{32}$  oz., \$14.50;  $\frac{1}{16}$  oz., \$26.00;  $\frac{1}{8}$  oz., \$46.00; 1/4 oz., \$82.00.



## **NEW "VELVET" VARIETIES**

Ball Originator Seed

• Pink Velvet. See above left.

Red Velvet (New—A Ball Origination). Our own  $F_1$  Hybrid Multiflora scarlet-red. Similar to Comanche but more uniform in habit and of a brighter, more intense color.

White Velvet (New-A Ball Origination). A clear white Multiflora with a definite silvery sheen. May show advantages over Paleface under certain growing conditions.

#### "SATIN" PETUNIAS

• Red Satin. See above left.

Peach Satin (New). Originator's description: "Warm salmon-pink; large flowered and slightly taller than Red Satin.

Pink Satin (New). Brilliant rose-pink. Globe-shaped plants are slightly taller than Red Satin.

Prices above varieties (except Red Satin and Blue Ribbon), each: ½ tr. pkt., \$1.00; tr. pkt., \$1.75; 1/128 oz., \$3.50; 1/64 oz., \$6.50; 1/32 oz., \$11.70; 1/16 oz., \$20.00; ½ oz., \$35.00; 1/4 oz., \$60.00.

## VISIT US ON FIELD DAY

You're welcome to come at any time throughout the year to inspect our greenhouse and test gardens, but we urge you to make it on our Annual Field Day if this is possible, as we make special preparations for your arrival—our annual trials are at their peak; Mum crops timed in the greenhouse for Field Day; lunch at noon, etc. Watch trade papers for date.







#### • GLITTERS

(All-America Winner for 1957). This fiery combination of bright scarlet-crimson and white draws plenty of attention wherever grown. Truly bril-

liant, and a "must" for bedding plant growers everywhere.  $\frac{1}{2}$  tr. pkt., \$1.35; tr. pkt., \$2.50;  $\frac{1}{128}$  oz., \$4.50;  $\frac{1}{16}$  oz., \$8.00;  $\frac{1}{182}$  \$15.50;  $\frac{1}{16}$  oz., \$30.00;  $\frac{1}{18}$  oz., \$57.00;  $\frac{1}{14}$  oz., \$108.00.



#### · LINDA =

Brilliant rosy salmon flowers similar to Silver Medal are carried on bushy, solid plants of great vigor. Will withstand heavy wind and rain without plants break-

ing down. Somewhat more dwarf than Silver Medal.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{128}$  oz., \$3.50;  $\frac{1}{64}$  oz., \$6.50;  $\frac{1}{52}$  oz., \$11.70;  $\frac{1}{16}$  oz., \$20.00;  $\frac{1}{8}$  oz., \$35.00;  $\frac{1}{4}$  oz., \$60.00.

## ГРИУВКІЮ F Hybrid Multifloras ГРИУВКІЮ

**Brilliancy.** Quite similar to Apache in its deep cerise-rose coloring but taller and more vigorous in growth. Makes a wonderful show for bedding.

Pink Beauty. A slightly deeper and clearer shade than Pink Sensation, and more dwarf in growth.

• Pink Sensation. One of the most vigorous, free flowering, fast growing Petunias we have ever seen. Light silvery pink. A very useful Petunia for bedding where a real show of color is wanted. • Rose Charm. Rich, brilliant rose. Wonderfully vigorous, free branching and flowering. Somewhat procumbent in habit as compared with most Petunias, it forms a sort of "mat" or carpet of bloom in which one plant joins to its neighbor. A real "floral ground cover!"

• Silver Medal. Medium large flowers of soft salmon-pink are lavishly produced on free-branching, semi-upright type plants. Here is an ideal shade for the trade which likes soft pastel colors.

• Starflight (New). The white, starred, deep velvety crimson of the popular Elk's Star in new Hybrid form. Vigorous, free flowering and very showy.

### INDIAN SERIES

The Indian Series is offered to help you to sell these free flowering, vigorous **Multifloras** as a group or series. They have somewhat similar height and plant shape, plant well together, bloom the same time. Let one Indian help sell another. Use Comanche to kick off the tribal procession!



#### • PALEFACE =

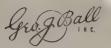
Pure white flowers with small creamy eye. This vigorous and free flowering variety is one of the best. Widely grown everywhere.

#### • COMANCHE =

Popular scarlet-red Hybrid Multiflora. Vigorous and fast growing, but our trials have indicated it is somewhat more variable than Red Satin.

**Prices** all above varieties (except Glitters):  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75; 1/128 oz., \$3.50; 1/64 oz., \$6.50; 1/32 oz., \$11.70; 1/16 oz., \$20.00;  $\frac{1}{8}$  oz., \$35.00;  $\frac{1}{4}$  oz., \$60.00.





## FHYBRID F1 Hybrid Multifloras FHYBRID

#### INDIAN SERIES, Continued

- Apache. An intense deep cerise-rose similar in color to Inca, but without the gold throat.
- Axtec. Bright scarlet-red with contrasting gold throat. A smaller flowered version of Fire Dance, but more vigorous in growth with blooms more freely produced.
- Inca. Bright deep cerise-rose—about the color of Apache but with a lively, contrasting golden throat. Very appealing.

Mohawk. A bright rose-pink between Rose Charm and Pink Sensation in color, and similar in habit to the latter. Very vigorous and free flowering.

- Sioux. A deep, intense salmon shading toward red at throat. Midway between Linda and Comanche in color. Very vigorous and blooms profusely.
- **Multiflora Mixture.** Our own formula mixture of the F<sub>1</sub> Hybrid Multifloras blended to provide a well balanced mixture of colors.

Prices last 6, each:  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{128}$  oz., \$3.50;  $\frac{1}{34}$  oz., \$6.50;  $\frac{1}{32}$  oz., \$11.70;  $\frac{1}{16}$  oz., \$20.00;  $\frac{1}{3}$  oz., \$35.00;  $\frac{1}{4}$  oz., \$60.00.

MULTIFLORA COLLECTION: One tr. pkt. each of Paleface, Blue Ribbon, Red Satin, Glitters, Linda, and Rose Charm (catalog value, \$12.25) for \$11.00.

## Dwarf Bedding Petunias

### THE 10 BEST DWARF BEDDING VARIETIES ARE INDICATED BY DOTS

Each year on the basis of reports from customers, as well as from our own flowering trial reports, we revise our recommended list of 10 best varieties. It should be noted that this list does not include the F<sub>1</sub> Hybrids, as we have placed these varieties in a "class by themselves".

#### ADMIRAL

This is one of our finest blue Petunias. Large, attractively ruffled flowers; clear bright velvety blue. Ideal for either pots or bedding.

pots or bedding. Tr. pkt., **80c**; ½4 oz., **\$1.65**; ½2 oz., **\$2.90**; ½6 oz., **\$5.25**; ½ oz., **\$9.50**.

Blue Bedder. Vigorous growing, large flowered mid-blue. Tr. pkt., 40c; ½ oz., \$1.35; 1 oz., \$4.25.

#### • CELESTIAL ROSE IMPROVED.

Deeper rose coloring and slightly larger flowers than the original stock. Unexcelled for pot plant work or bedding. Our strain has been unsurpassed in the florist trade for over 20 years.

Tr. pkt., 60c; 1/8 oz., \$1.15; 1/4 oz., \$2.00; 1 oz., \$6.50.

• Cheerful. Medium large, star-shaped flowers of clear salmon are freely produced on uniform, fairly dwarf plants. Tr. pkt., 75c; ½6 oz., \$2.00; ½8 oz., \$3.75; ½4 oz., \$6.00.

Cockatoo. Irregularly marked purple and white. Tr. pkt., 75c;  $\frac{1}{2}$  oz., \$1.50;  $\frac{1}{2}$  oz., \$2.75;  $\frac{1}{2}$  oz., \$5.25.

Cream Star. Star-shaped, creamy white. Tr. pkt., 50c; ½ oz., \$1.25; ½ oz., \$2.25.

• Elk's Star. Deep velvety crimson with white star. Tr. pkt., 60c; ½6 oz., \$1.80; ½ oz., \$3.30; ½ oz., \$6.00.

Fair Lady. Light pink. For flat sales and bedding we recommend Pink Sensation which is more vigorous and uniform. Tr. pkt., 60c; ½ oz., \$1.40; ½ oz., \$2.50; ¼ oz., \$4.25.

• Fire Chief. ALEMBRICAN TRUE SCARLET-Red, turning to deep salmon-rose with age.

Tr. pkt., 50c; ½6 oz., \$1.65; ½8 oz., \$2.90; ½4 oz., \$5.00.

Glow. Bright rose-red flowers are produced in abundance on dense growing, vigorous plants of uniform habit.

Tr. pkt., 50c; ½6 oz., \$1.25; ½ oz., \$2.00; ¼ oz., \$3.75; 1 oz., \$13.50.

• Heavenly Blue. Still the best silvery blue in this class. This medium to light blue shade combines beautifully with other bedding subjects.

Tr. pkt., 50c; ½ oz., \$1.00; ¼ oz., \$1.75; 1 oz., \$6.00.

Igloo. White. Extra dwarf, well shaped plant. Clean, bushy habit. Tr. pkt., 60c; ½ oz., \$1.15; ¼ oz., \$2.00; 1 oz., \$6.50.

King Henry. Deep velvety crimson or mahogany-red. Compact growth makes this a choice pot plant variety. Tr. pkt., 75c;  $\frac{1}{32}$  oz., \$1.50;  $\frac{1}{16}$  oz., \$2.75;  $\frac{1}{8}$  oz., \$5.25;  $\frac{1}{4}$  oz., \$10.00.

Lipstick. Bright cerise-rose flowers faintly shaded salmon, with white throat, are carried on fairly dwarf plants of uniform size. Tr. pkt., 50c; ½ oz., \$1.65; ½ oz., \$2.90; ½ oz., \$5.00.

• Moonstone. (Nearest to yellow). This F₂ Petunia is vigorous in growth with freely produced Multiflora type flowers of light ivory-yellow. Blends well with purples and blues. Tr. pkt.; \$1.00; ½₂ oz., \$3.50; ½₁6 oz., \$6.50; ½ oz., \$12.00.

Rosy Morn. Popular rose-pink with large white throat. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$5.25.

**Salmon Supreme.** Clear salmon-pink flowers. Tr. pkt., **50c**; ½<sub>32</sub> oz., **\$1.50**; ½<sub>16</sub> oz., **\$2.75**.

Sky Chief (New). Clear light blue; a bit lighter than Heavenly Blue, and more dwarf in growth.

Tr. pkt., 60c; ½ oz., \$1.80; ¼ oz., \$3.30; 1 oz., \$9.90.

Snow Queen. Pure white, free flowering habit.

- Tr. pkt., 50c; ½ oz., \$1.00; ½ oz., \$1.75; 1 oz., \$6.00.

  Snowball Imp. Pure white. Compact and uniform, yet vigorous.
- Tr. pkt., 50c; ¼ oz., \$1.80; 1 oz., \$5.40.

  Topax Queen. A remarkable color combination of glowing carmine-rose with distinct orange-scarlet overtones.

carmine-rose with distinct orange-scarlet overtones. Tr. pkt., 50c; ½ oz., \$1.00; ½ oz., \$1.75; I oz., \$6.00.

Twinkles. Very showy rose-pink with white star. Uniform growth

and markings. Tr. pkt., 60c; ½ oz., \$1.70; ½ oz., \$3.00; 1 oz., \$9.00.

Volvet Rall Dork red: almost identical to King Henry in

• Velvet Ball. Dark red; almost identical to King Henry in color but more spreading in growth and better adapted for bedding use. Tr. pkt., 75c; ½2 oz., \$1.50; ½6 oz., \$2.75; ½ oz., \$5.25; ½ oz., \$10.00.

Violacea. Deep purple. Tr. pkt., 40c; ¼ oz., \$1.40.

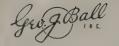
#### • BEST FORMULA MIXTURE

We mix this ourselves, blending the best of the above varieties in proportions pleasing to the eye. Fine for spring flat or pack sales. Tr. pkt., 50c;  $\frac{1}{16}$  oz., 1.00;  $\frac{1}{8}$  oz., 1.85;  $\frac{1}{4}$  oz.,  $\frac{1}{4}$ 

Dwarf Bedding Mixture. A blend of good bedding varieties. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

Dwarf Bedding Starred Mixture. Nice mixture of starred types. Tr. pkt., 75c; ½ oz., \$3.00; 1 oz., \$9.00.

COLLECTION: For growers who are interested in trying all the 10 Best Varieties separately rather than in a mixture, we offer a tr. pkt. of each of the named dotted varieties for \$5.75.



### **PHYSALIS**

PERENNIAL (P. Alkekengi) 18,000 S. 3-4 weeks 65-75°

Francheti (Chinese Lantern Plant). 2 ft. Giant orange-scarlet pods. Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.50.

Pinks. See Dianthus, pages 22 and ??.

#### PLATYCODON (Balloon Flower)

PERENNIAL (P. grandiflorum) 28,000 S. 2-3 weeks 65-75° Very attractive garden perennial. 2 ft.

Blue. A clear, deep violet-blue. Shell-Pink

Prices above 3, each: tr. pkt., 40c; ½ oz., 90c; ¼ oz., \$1.60.

#### PLUMBAGO

ANNUAL (P. capensis)

2000 S. 3-4 weeks 65-75°

1½-inch flowers are borne on terminal spikes.

Blue. Clear azure-blue. 100 seeds, 90c; 1000 seeds, \$8.00.

White. 100 seeds, 90c; 1000 seeds, \$8.00.

## POPPY (Papaver)

ANNUAL (Papaver nudicaule) S. See below 1-2 weeks 65-75° ICELAND. 275,000 S. 1 ft. The standard type for spring greenhouse forcing. Sow direct either in beds or pots. Quick growing for borders. Often blooms first year.

Sandford's Giants. A fine, brilliantly colored mixture. Tr. pkt., 35c; ¼ oz., \$1.25; 1 oz., \$3.75.

SHIRLEY (P. rhoeas), 70,000 S. 2 ft.

Double Mixture. Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.

PERENNIAL (P. orientale) 140,000 S. 1-2 weeks 65-75° ORIENTAL POPPY. 3 ft. Large, cup-shaped flowers with crinkled petals. Newly opened flowers when cut in early morning or late evenings will keep in water 3 to 5 days if ends of stems are well burned within 5 minutes of cutting.

Beauty of Livermere. Dark oxblood-red.

Brilliant. Vivid fiery red.

Princess Victoria Louise. Beautiful light orange.

Salmon Shades. Huge blossoms in unusual salmon shades.

Mixture of all colors.

Prices above 5, each: tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

## PORTULACA (Moss Rose)

280,000 S. 2-3 weeks 65-75° ANNUAL (P. grandiflora) 6 in. Very popular and showy bedding plant. While easily grown from seed direct sown in garden, your customers will eagerly buy young plants in bloom.



#### DOUBLE MIXTURE

This is an unusually choice and wonderfully showy mixture of brilliant colors. Produces 85 to 90% true double flowers. A special imported strain.

Tr. pkt., 30c; ¼ oz., \$1.25; 1 oz., \$3.75.

Single Mixture. Tr. pkt., 25c; 1/4 oz., 70c; 1 oz., \$2.35.

Single Jewel. Extra large flowers of glowing crimson. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

## PRIMULA MALACOIDES

ANNUAL (P. malacoides) 385,000 S. 3-4 weeks 65-75° Seed may be sown from May until October for early spring blooming in various pot sizes.

• Brightness. The first F2 Hybrid Primula ever offered! Flowers are a rich, luminous, deep rose and, as observed in our trials, Brightness was "head and shoulders" above any other variety in uniformity, vigor and profusion of blooms. A genuinely outstanding Primula. Tr. pkt., \$1.25.

Glory of Riverside Imp. An excellent variety with freely pro-

duced, beautiful salmon-rose flowers.

White Giant. Fine pure white; large flowers and heavy stems. Brilliancy Imp. Large flowers of rich wine-red.

Mrs. Eriksson of Riverside. Large flowers of glowing rose-red on compact plants of medium height.

Ball Lavender. Bright orchid-lavender.

Mixture. Our own balanced formula mixture.

Prices above 6, each: Tr. pkt., \$1.25;  $\frac{1}{164}$  oz., \$2.75;  $\frac{1}{132}$  oz., \$5.25.

• Red Velvet. Newly opened flowers are a bright coral-rose changing to deep, velvety crimson-red as they mature. Tr. pkt., \$1.50; ½28 oz., \$2.50.

#### **OBCONICA**

ANNUAL (P. obconica)

130,000 S. 3-4 weeks 65-75°

Large flowered and showy pot plants. A favorite for many years. Sow from January on for Christmas and later. The following strains are produced by the world's leading specialists.

• Fasbender's Red. An outstanding extra large flowered deep

Mohnstein's Red (Atrosanguinea). Popular deep red.

• Mueller's Berlin Rose (Mueller's Rosea). Soft medium rose.

Salmon-Rose (Lachsrosa). Salmon-rose shades.

Sky-Blue (Coerulea). Clear mid-blue. White. Large, clean flowers.

Formula Mixture. Carefully blended from above colors.

Prices above 7, each: Tr. pkt., \$1.25; ½4 oz., \$2.75; ½2 oz., \$5.00.

#### PRIMULA, CONTINUED ON PAGE 50



PORTULACA, OUR IMPORTED DOUBLE MIXTURE



SUPER-DWARF, COMPACT FIREBALL

DWARF EARLY, ST. JOHN'S FIRE

MEDIUM TALL MIDSEASON, BLAZE OF FIRE

## SALVIA

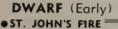
ANNUAL (S. species) 7500 S. 2-3 weeks 65-75° SPLENDENS (Scarlet Sage). This strikingly colorful, brilliant scarlet annual is popular wherever bedding plants are grown. Be sure to include some of the newer dwarf varieties for your cus-

white Petunias or with a background of evergreens. NOTE: Salvia is especially sensitive to methyl bromide treated soil.

#### **EXTRA DWARF**

#### • FIREBALL =

In Fireball we offer an entirely new, earlier, more dwarf Salvia which should find abundant use where extra early blooming and more dwarf habit is wanted. Fireball has a unique base-branching, almost spreading habit, and will bloom profusely and continually until frost. Blooms early (June 20) making flatted Salvia sell on sight! Also sells well in pots or paks-first flowers 10 weeks from sowing. Not to be mistaken for an old obsolete European variety offered under the same name. 10 inches tall. Tr. pkt., \$1.25;  $\frac{1}{8}$  oz., \$2.20;  $\frac{1}{4}$  oz., \$4.00; 1 oz., \$12.00.





June 25. The most popular dwarf Salvia. About 12 inches high. Tr. pkt., \$1.00; ½ oz., \$1.65; ¼ oz., \$2.75; ½ oz., \$5.00; 1 oz., \$9.00; 4 ozs., \$30.00.

• Blaze of Fire. June 30. The standard early strain. Closely follows St. John's Fire in flowering. 14 to 16 in. Tr. pkt., 85c; 1/4 oz., \$2.25; 1/2 oz., \$3.85; 1 oz., \$7.25; 4 ozs., \$24.00.

#### MEDIUM (Midseason)

• Firebrand (Early Harbinger). July 10. 18 in. Between Blaze of Fire and America in earliness of flowering. Remains in full flower throughout the summer. Tr. pkt., 85c; ¼ oz., \$2.25; ½ oz., \$3.85; 1 oz., \$7.25; 4 ozs., \$24.00.



#### · AMERICA =

(Globe of Fire). July 23. 20 in. This is our uniformly true and even stock of this fine variety. Follows Firebrand in flowering date. Popular for background planting.

Tr. pkt., 65c; ¼ oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$20.00.

#### TALL (Late)

tomers, too. The following are listed according to flowering dateearliest first. (Sown April 1st in Chicago). Effective planted with

Bonfire. July 25. 26 in. Medium tall, very even. Popular for background planting. Tr. pkt., 65c; ¼ oz., \$1.50; 1 oz., \$5.25; 4 ozs., \$17.50.

Clara Bedman. July 25. A very free flowering, medium tall strain. Similar to Bonfire. Originator's seed. Tr. pkt., 65c; ¼ oz., \$2.00; 1 oz., \$6.00; 4 ozs., \$20.00.

Splendens Tall. August 12, 2½ ft. The original late flowering species. Tr. pkt., 45c; ¼ oz., \$1.40; 1 oz., \$4.50; 4 ozs., \$15.00.

#### OTHER COLORS

White Fire. June 24. 12 in. A creamy white Salvia, similar in habit to St. John's Fire. Limit, tr. pkt. only, \$1.00.

Rose Flame. August 7. 20 in. Coral-pink calyx surrounding the deeper rose petal tube. Tr. pkt., 75c; \(\frac{1}{4}\) oz., \$2.00; 1 oz., \$6.00.

Barbara (New). June 25. Pink with orange corolla. About 12 inches high. Tr. pkt., \$1.00; 1/8 oz., \$3.50.

FARINACEA (Blue Salvia), 24,000 S.

### ROYAL BLUE

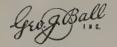
July 1. 3 ft. This is our own reselected strain, grown especially for us from an entirely new selection. Color is a true deep blue. We highly recommend this.

Tr. pkt., 50c; ¼ oz., \$1.45; 1 oz., \$5.00.

HORMINUM (Foliage Plant). 9500 S.

• Pink Sundae. July 15. 14 in. Bushy, base-branching plants sending up many stems, each terminating in a cluster of bright pink leaves in the same manner as a Poinsettia. Very attractive, novel, and easy to grow. Tr. pkt., 30c; \( \frac{1}{4} \) oz., 90c; 1 oz., \$2.70.

PERENNIAL (S. patens) 3800 S. 2-3 weeks 65-75° Patens (Centian Sage). 21/2 ft. Deep, bright blue, hardy Salvia. Tr. pkt., 75c; 1/4 oz., \$2.00; 1 oz., \$6.00.



## PRIMULA, Continued from page 48

#### CHINENSIS (Chinese Primula)

18,000 S. 3-4 weeks 65-75° ANNUAL (P. chinensis) A popular pot plant with many retail growers. Very colorful and showy. Sow from March on for Christmas and later.

Kardinal. Vivid, intense orange. Tr. pkt., \$1.50; 1/64 oz., \$5.00.

Special Mixture. A choice assortment of colors. Tr. pkt., \$1.25; 1/32 oz., \$3.75.

#### VERIS

PERENNIAL (P. veris) 25,000 S. 3-6 weeks 65-75° A very useful class for spring pot work or as garden subjects. Plants lifted from outdoors in fall will make specimen pot plants from February on. 6 to 12 in.

● Colossea. 33,000 S. Extra large flowers (1½ to 2 in.), on long stiff stems. Remarkable range of unusual colors. Tr. pkt., \$1.25; 1/8 oz., \$3.00; 1/4 oz., \$5.25; 1 oz., \$17.00.

Giant Munstead Strain. The standard strain for bedding; in shades of yellow.

Tr. pkt., \$1.25; ½ oz., \$3.00; ¼ oz., \$5.25; 1 oz., \$17.00.

Polyanthus Mixture (Unwin's strain). Tr. pkt., \$1.00; 1/8 oz., \$2.25; 1/4 oz., \$4.25; 1 oz., \$12.50.

• Giant Monarch Strain. A fine large-flowered Auricula bicolored

mixture. Tr. pkt., \$1.25; ½ oz., \$3.00; ¼ oz., \$5.25; 1 oz., \$17.00.

Giant Crimson Giant White

Giant Yellow **Blue Flowered** 

Prices above 4, each:

Tr. pkt., \$1.00; 1/16 oz., \$1.85; 1/8 oz., \$3.40.

### • DENTICULATA =

Large heads of ball-shaped flowers. Colors vary from white to deep rosy lilac. Tr. pkt., \$1.00; ½6 oz., \$2.40; ¼ oz., \$9.00.

Cashmeriana. Ball-shaped heads of rich purple flowers with yellow centers. Tr. pkt., \$1.00; ½ oz., \$2.40; ¼ oz., \$9.00.

Vulgaris (True Yellow English Primrose). Tr. pkt., 60c; ¼ oz., \$1.75; 1 oz., \$6.50.

Japonica. Crimson, rose and pink flowers borne in whorls on 6- to 9-in. stems. Tr. pkt., 40c; 1/8 oz., \$1.20; 1/2 oz., \$3.60.

## **PYRETHRUM** (Painted Daisy)

18,000 S. 1-2 weeks 65-75° PERENNIAL (P. roseum) Long prized as a source of summer cut flowers. Will make an excellent showing with a minimum of care. 2 ft.

• James Kelway. Best deep crimson.

Robinson's Dark Crimson. Giant flowered, dark red.

Rose. Single pink flowers.

White.

• Robinson's Mixture. Large single mixture.

Prices above 5, each: Tr. pkt., 60c; ¼ oz., \$1.50; 1 oz., \$4.75.

Double White **Double Yellow** Double Red

Double Pyrethrum seed does not produce 100% double flowersthe percentage is better the second season.

Prices above 3, each: Tr. pkt., 50c; 1/16 oz., \$1.50; 1/4 oz., \$4.50.

• Double Mixture. The percentage of large flowers, with double row of petals, exceeds that of any other strain. Note, however, that 2 years' growth is required to produce the finest flowers in any double Pyrethrum. Tr. pkt., 60c; ½ oz., \$1.50; ¼ ez., \$2.75; 1 oz., \$8.25.

## **OUEEN ANNE'S LACE FLOWER**

ANNUAL (Daucus carota)

36.500 S. 2-3 weeks 65-75°

Large heads of lacy white flowers. Nice filler for basket work, 2 ft. Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$1.80.

## RANUNCULUS (Buttercup)

ANNUAL (R. asiaticus)

5700 S. 3-5 weeks 65-75°

Giant Mixture. 18 in. Double flowers in shades of yellow, orange, red, blue and white. Tr. pkt., 50c; ½ oz., \$1.10; ¼ oz., \$1.90; 1 oz., \$6.00.

## RICINUS (Castor Bean)

ANNUAL (R. communis)

S. See below 2-3 weeks 65-75°

Very fast growing, tall, large-leaved plants. Good for tall hedges and windbreaks.

Crimson Spire. 75 S. 8 ft. Bronzy red foliage with crimson stems and red fruit. 1 oz., 45c; 4 ozs., \$1.40; 1 lb., \$4.50.

**Zanzibariensis Mixture.** 25 S. 10 ft. Foliage all green. 1 oz., **30c**; 4 ozs., **\$1.00**; 1 lb., **\$3.00**.

## RUDBECKIA (Coneflower)

ANNUAL (R. hirta)

85,000 S. 2-3 weeks 65-75°

A very free flowering bedding plant. Valuable for cutting.

Gloriosa Daisy (New). 3 ft. This tetraploid Rudbeckia produces large, single flowers up to 6 inches across in shades of yellow and mahogany-red.  $\frac{1}{32}$  oz., 85c;  $\frac{1}{16}$  oz., \$1.50;  $\frac{1}{4}$  oz., \$4.50.

• Starlight. 21/2 ft. The only Rudbeckia strain we have seen that actually produces fully double, Dahlia-like flowers. An attractive mixture of yellow, orange and brown shades flowering on long stems; flower type ranges from nearly single to fully double. Tr. pkt., 35c; ½ oz., \$1.00; ½ oz., \$1.75; 1 oz., \$5.25.

PERENNIAL

7000 S. 2-3 weeks 65-75° (Echinacea purpurea)

Purpurea. 4 ft. Reddish purple flowers. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.50.

## SAINTPAULIA (African Violet)

ANNUAL (S. ionantha)

750,000 S. 3-4 weeks 65-75°

Nice 3-inch pots of this extremely popular plant can be grown from seed in 6 to 8 months, if care is exercised in germination. Handle about like Begonia seed. Uniform moisture, a 65° temperature, plenty of soil organic matter, and protection from bright sun are necessary in growing good Saintpaulias.

• Blue Fairy Tale. Extra free blooming and fast growing. Bright blue flowers. Tr. pkt., \$2.00; 1/128 oz., \$15.00.

Single Mixture. A choice, large flowered mixture of colors in many attractive shades. 300 seeds, \$2.00.

Pink Shades (New). A large proportion of various pink shades is included in this strain. Tr. pkt. (300 seeds), \$3.00.

White. 50% true white-balance blue-eyed. Various foliage types. 300 seeds, \$2.50.

• Double Mixture. 40% double and semi-double—balance single. All colors and foliage types are represented here. 300 seeds, \$3.00.

## Gro. g. Ball

#### SALPIGLOSSIS

#### ANNUAL

(S. sinuata superbissima) 125,000 S. 2 weeks 65-75° Salpiglossis furnishes cut flower material either from a January February sowing indoors or a later one grown outdoors. Colorful. 2½-in., funnel-shaped flowers.

Emperor Mixture. 21/2 ft. Tall, for cutting. All colors.

Dwarf Giant Flowered Mixture. 20 in. For bedding and borders. All colors.

Prices above 2, each: Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$1.80.

#### SANVITALIA

ANNUAL (S. procumbens) 50,000 S. 1-2 weeks 65-75° Procumbens (Creeping Zinnia). 4 to 6 in. A very fine, dwarf border plant with many small yellow flowers. Tr. pkt., 30c; ½ oz., 90c; 1 oz., \$2.70.

### SAPONARIA

PERENNIAL (S. ocymoides) 5500 S. 2-3 weeks 65-75° Ocymoides. 9 in. Trailing rock plants; rose-pink flowers. Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.25.

## SCABIOSA (Pincushion-Flower)

ANNUAL (S. atropurpurea) 4500 S. 2-3 weeks 65-75° Tall. 2 to 3 ft. No retail grower should be without some Scabiosas for spring greenhouse or outdoor summer cutting. They're longstemmed and free flowering with a variety of pleasing colors to choose from.

- Shasta Improved. Fine pure white.
- Oxford Blue. Somewhat darker than Blue Moon. Extra large flowers on fine, long stems.
- Loveliness. Extra large flowered, deep salmon-pink.
- Blue Moon. Fine lavender-blue color with extra large flowers on long, wiry stems. The standard market color. Prices above 4, each: Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.

#### • GIANT MIXTURE =

A special strain containing only the new large flowered varieties. Well balanced in good cut-flower colors. Use this mixture if you want only a small planting of Scabiosa for cutting. Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.

DWARF CLASS. For bedding and garden work.

Tom Thumb Mixture. 10 in. Extra dwarf and compact plants for bedding and edging. Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.

PERENNIAL (S. caucasica) 2400 S. 2-3 weeks 65-75° Excellent large flowered perennial cut-flower material. Seed germination sometimes slow. Flower heads up to 3 in. across.  $2 \frac{1}{2}$  ft.

Goldingensis. Large flowered, fine deep lavender. Tr. pkt., 60e; ¼ oz., \$1.75; 1 oz., \$5.25.

• House Mixture. Large flowers ranging from white to deep blue. Tr. pkt., 45c; 1/4 oz., \$1.35; 1 oz., \$4.00.

#### SEDUM

PERENNIAL (S. species) 400,000 S. 34 weeks 65-75°

Golden Carpet (Acre). 3 in. A very nice extra dwarf evergreen. Small light yellow flowers produced in June. Very strong, hardy grower. Tr. pkt. (3000 seeds or more), 50c.

Rock Garden Blend. Many species with various colors and forms make up this interesting mixture. Tr. pkt. (3000 seeds or more), 50c.

## SCHIZANTHUS (Butterfly Flower)

ANNUAL (S. species)

60,000 S. 1-2 weeks 65-75°

These easily grown plants literally cover themselves with a brilliant mass of showy blooms. A January sowing will produce nice 3-inch plants for spring combinations. Sow September to November for larger pot plants and spring cut flowers.

- Ball Giant Flowered. Extra large flowers (often 2 inches in diameter) and unusually brilliant colors. Nice for cutting or makes a choice pot plant if pinched.
- Ball Dwarf Mixture. A distinctly dwarf growing strain with large, compact heads of medium sized flowers. Makes an excellent pot plant.

Prices above 2, each: Tr. pkt., 60c; 1/8 oz., \$1.80; 1/4 oz., \$3.25.

## SHAMROCK

#### ANNUAL

(Trifolium repens minus)

28,000 S. 1-2 weeks 65-75°

True Irish Shamrock. For 2-inch St. Patrick's Day plants sow in late December or early January using 3 or 4 seedlings per pot. Grow cool (50°) after germination. Our seed is the true Trifolium (clover). The best results will be obtained in soil that is about 50% clay. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.20.

#### SMILAX

ANNUAL (Asparagus asparagoides) 4000 S. 3-4 weeks 65-75° Popular climber for greens.

Tr. pkt., 40c; ¼ oz., 80c; 1 oz., \$2.50.

Snow-on-the-Mountain. See Euphorbia, page 23.

Solanum. See Cherries, Christmas, page 15; Peppers, Christmas, page 34; and Love Apple, page 30.

## **SNAPDRAGONS**

See pages 52-56.

#### STATICE

ANNUAL (Limonium species) 350 S. 2-3 weeks 65-75° SINUATA. 21/2 ft. This attractive annual is largely grown outdoors, especially in southern localities, but a mid-winter sowing makes a nice late spring greenhouse crop. May be used in the fresh state or dried.

• Heavenly Blue. Bright, clear sky-blue.

Market Rose. A warm, deep rose shade.

- Market Grower's Blue. Fine even deep blue. Excellent stock. Lavender Queen. A very pleasing shade of pastel lavender.
- Snow Witch. Beautiful, clear white.
- Bonduelli Superba. Similar to the Sinuatas with yellow flowers. Prices above 6, each: Tr. pkt., 25c; 1 oz., 75c; 4 ozs., \$2.50; 1 lb., **\$7.50**.
- Superb Mixture. Contains a complete range of colors, from white through chamois, pink, rose and light blue to deep blue. Heads are large and compact. Tr. pkt., 25c; 1 oz., 75c; 4 ozs., \$2.50; 1 lb., \$7.50.

Suworowi (Russian or Rat-Tail Statice), 12,000 S. Useful for greenhouse forcing. Long, lavender spikes. Tr. pkt., 30c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### PERENNIAL

(Limonium species)

S. See below 2-3 weeks 65-75°

Perennial Statice are very hardy, make good cut-flower material and can be dried and dyed.

Caspia. 170,000 S.  $2\frac{1}{2}$  ft. Seedlings flower second season. Lilac. Tr. pkt., 30c;  $\frac{1}{4}$  oz., 80c; 1 oz., \$2.75.

- Dumosa. 19,000 S. 18 in. Dense clumps of silvery gray flowers. Tr. pkt., 40c; ¼ oz., \$1.00; 1 oz., \$3.00.
- Latifolia (Sea Lavender). 40,000 S. 21/2 ft. Standard blue perennial Statice. Tr. pkt., 30c; 1/4 oz., 65c; 1 oz., \$2.00.

Perezi. 14,000 S. Flowers in large lavender heads first year from seed. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75.

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Gro. g. Ball

## Forcing Snapdragons

COMPLETE LIST OF VARIETIES - OUR RECOMMENDATIONS ARE DOTTED SEE PAGE 55 FOR SNAP CULTURE

(F) HYBRID

All Snapdragons listed on these pages are genuine TETHYBRID varieties except those marked "inbred" which are self-pollinated kinds.

future crops.

ANNUAL (Antirrhinum majus)

HYBRID

125,000 S. 1-2 weeks 65-75°





HERCULES SNOWMAN

ABOUT BLOOMING DATES. Based upon their performance in our greenhouses here in West Chicago, we have classified the Snap varieties listed here as early (E) for those which ordinarily give the best results in November and December; midseason (M) for those which are normally at their best when flowered from January through April or in late September and October; late (L) for those that give the finest performance from March through May. Note that there is an over-lap in March and April during which both the "M" and "L" classes are equally satisfactory. The varieties marked "S" include those which are especially adapted for summer greenhouse blooming from May to September; these varieties will usually refuse to flower at all when days are shorter and light is less intense. Remember, though, that conditions vary in different localities and that

keeping your own records will prove an invaluable guide in planning 1/2 Pkts. Available Only Where Listed

#### BALL HYBRID SNAPS

The following Ball Hybrids have come to be accepted as standards with growers everywhere—with improvements being added annually. See listings on these pages for a complete description of these varieties.

YELLOW Golden Spike Doubloon (New)

Flower Girl Hercules Holiday Pink Ice

PINK

BRONZE and RED WHITE Indian Chief Snowman Pike's Peak Navajo June Bride

**Bridesmaid** Showgirl Rosanna **Jackpot** 

LAVENDER

Lavender Lady Esquire Hyb. Form. Mix.

#### WHITE

Tr. pkt. • Snowman (Ball). M. Excellent pure white. This has won acclaim as the nation's most widely grown pure white for winter and spring ............½ tr. pkt., \$2.00..\$3.50 • Pike's Peak (Ball). L. Strong growing white with slight • June Bride (Ball). S. The first "hot weather" F1 Hybrid developed for late spring and summer single stem greenhouse use. It has hard, clean stems and is shatter-proof in the presence of ethylene gas. Sow from January through Albion (Yoder Bros.). M. A pure white which in our trials produces a better spike than White Knight although it is two weeks later ..... 3.50 Apollo (Yoder Bros.). M. Ivory; yellow lip ...... • Citation (Yoder Bros.). M. Ivory. Very fine, long spikes and clean, hard stems ..... 3.50 Ivory Tower (Pan-American). M. Long spikes of ivorywhite ...... \$2.00. 3.50 Jet Pilot (Yoder Bros.). M. Pure white ......... 3.50 Junglewood White (Inbred). L. Extra long stemmed white ...... \$1.25.. 2.00 Margaret (Inbred). M. Ivory. Very productive ......

Maryland White Improved (Winkler). M. Pure white. ......½ tr. pkt., \$2.00.. 3.50

Potomac White (Winkler), S. Summer flowering white white. For late spring and summer only . Snowdrift. L. Double flowering white. New, improved White Skies (New-Yoder Bros.). S. A good white Snap for summer only. Comparable to June Bride, but between that variety and Rockwood's Crystal White in flowering season. Available spring '58 .....

#### LIGHT PINK

• Hercules (Ball). L. Light pink for spring. Long spikes with clean, hard stems are big features here . . ... $\frac{1}{2}$  tr. pkt., \$2.00... Christina (J. S. Yoder). M. Popular light pink. About ... $\frac{1}{2}$  tr. pkt., \$1.75... 3.00 Maryland Pink Imp. (Winkler). M. Creamy light pink.

1/2 tr. pkt., \$1.50.

Maryland Pink Imp. (Winkler). M. Creamy light pink.

1/2 tr. pkt., \$2.00.

Nashua (New—Yoder Bros.). M. Light pink; earlier than 2.50

Rosebud. Recommended for January through March .... 3.50

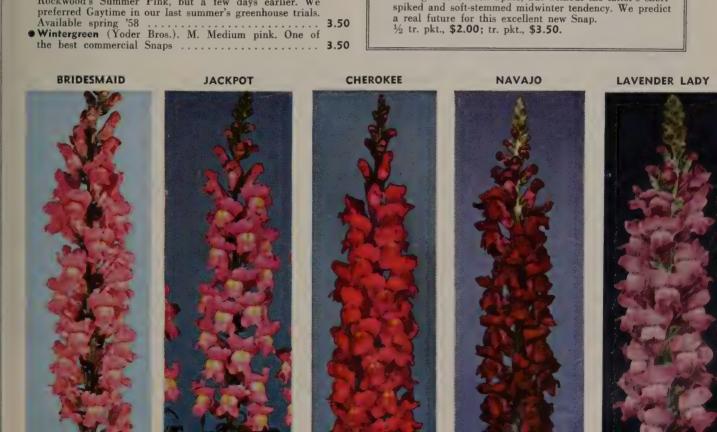


# Forcing Snapdragons

	-al-aradorio
LIGHT PINK, Continued Tr. pkt.	ROSE To play
<ul> <li>Native Dancer (Yoder Bros.). M. This light pink is a shade darker than Rosebud. Stems are hard and clean with well formed flower spikes. A good Snap \$3.50</li> <li>Rosebud (Yoder Bros.). L. Pleasing light pink for spring. Clean growth</li></ul>	<ul> <li>Bridesmaid (Ball). M. A clear medium rose reminiscent of Peggy Schumann with exceptionally long spikes of well placed, large florets</li></ul>
MEDIUM PINK	• Rosanna (Ball). M. A bright, deep rose with long, taper-
Pink Ice (Ball). M. Bright pink with lighter lips. An excellent hard stemmed variety for growers who want a	Better Times (Inbred). M. Bright cerise-rose
brighter pink to go with the Christina shade	Christmas Cheer (Windmiller). E. Extra early, produc-
• Flower Girl (Ball). M. Long, medium pink spikes carried on clean, firm stems. Smooth, even coloring and good	tive, bright rose
production	rose
Anne Marie (J. S. Yoder). L. Late flowering, clear, medi-	Maxine (Smith). E. Winter flowering medium rose ½ tr. pkt., \$1.75. 3.00
um pink	New Times (Pan-American). E. Bright, deep rose, Medi-
Chevy Chase Pink (Winkler). M. Similar to Maryland	um long spikes with firm stems ½ tr. pkt., \$1.75 3.00 Peggy Schumann (Inbred). L. Beautiful creamy rose 2.00
Pink, but a shade darker. Shatter-proof	Prestige (Yoder Bros.). M. Long spikes of medium rose with yellow lip. Growth somewhat grassy 3.50
Crusader (Yoder Bros.). M. Medium, silvery pink 3.50 Dorcas Jane. Not available; we suggest Crusader.	Star Charter (Yoder Bros.). L. Medium deep rose for spring
Gaytime (New—Yoder Bros.). S. Medium pink, yellow lip. A week earlier than Rockwood's Summer Pink with	Spartan Rose (Mich. State Univ.). M. Medium deep rose with long, heavy spikes. For late winter and spring only.
better vigor, stem and color. For summer only. Available	½ tr. pkt., \$1.75 3.00
spring '58	VELLAN
Potomac Pink (New-Winkler). S. Summer flowering	YELLOW
pink Hybrid	REAL WINTER SUNSHINE!
rose. For late spring and summer only. ½ tr. pkt., \$1.75 3.00	Doubloon (New—Ball). M. Here's the rich, deep "treasure-gold" color you've wanted for years in a true mid-
• Rowenna (Yoder Bros.). E. Similar to Wintergreen, but earlier	winter blooming Snap. Doubloon is many shades deeper
Summer Jewel (New-Yoder Bros.). S. Same color as	and brighter than War Admiral or Patricia. In fact, it's as bright as Golden Spike, but without the latter's short-
Rockwood's Summer Pink, but a few days earlier. We	as bright as Golden Spike, but without the latter's short-

areal future for this excellent new Snap.

½ tr. pkt., \$2.00; tr. pkt., \$3.50.



Gro. g. Ball

## Forcing Snapdragons

F HYBRID

All Snapdragons listed on these pages are genuine Three varieties except those marked "inbred" which are self-pollinated kinds.

)(F) HYBRID

YELLOW, Continued Tr. pkt.	RED Tr. pkt.
Golden Spike (Ball). M. A rich, deep golden yellow with	• Cherokee (Ball). E. & M. A true "Christmas" scarlet-
long, tapering spikes. Best yellow for spring	red-not the crimson or wine-red color commonly grown.
½ tr. pkt., \$2.00. \$3.50  Broker's Tip (Yoder Bros.). M. Medium yellow for late	Long, well formed spikes with sturdy stems
winter and spring. Firm stems	• Navajo (Ball). M. & L. We consider this the finest all-
Dark Star (New-Yoder Bros.). S. A deep yellow with	purpose red Snap available. Should be sown a week earlier
good spikes and hard stems. A week earlier than Rock- wood's Summer Yellow and a better Snap. For summer	than other varieties for winter ½ tr. pkt., \$2.00 3.50  Commando (Yoder Bros.). E. Tall growing copper-red
only. Available spring '58 3.50	shade 3.50
Ethel (Inbred). M. Medium yellow	Man-O-War (Yoder Bros.). E. A copper-red shade with
Goldrush (Winkler). M. Large flowered medium yellow	yellow lip. Similar in color to Commando but a cleaner grower with better flower placement
• Patricia (J. S. Yoder), M. Medium vellow	Maryland Red (Winkler). M. Large flowered bright red.
$\frac{1}{2}$ tr. pkt., \$2.00 3.50	
Potomac Yellow (Winkler). S. Medium yellow. Summer flowering Hybrid	Priscilla Ann (J. S. Yoder). M. Attractive crimson or wine-red
• Rockwood's Summer Yellow (Inbred). S. Fairly deep	Rockwood's Summer Red (Inbred). S. For late spring
yellow. For late spring and summer only	and summer only
• Seabiscuit (Yoder Bros.). M. Medium yellow. Similar to	Shisler's Red (Inbred), M. Wine-red 2.00
War Admiral except somewhat later and taller 3.50	LAVENDER
Spiwak's Yellow (Inbred). M. Originator's description, "rich yellow with pencil-hard stem; large, ruffled florets."	• Lavender Lady (Ball). M. A deep rosy lavender shade
We have not trialed this variety ½ tr. pkt., \$1.75 3.00	with excellent spikes and stems. For late winter and
• War Admiral (Yoder Bros.). M. Excellent medium yel-	spring
low for midwinter	Esquire (Ball). M. Bright wine or fuchsia-purple
florets½ tr. pkt., \$2.00 3.50	Ball Lavender (Inbred). L. Rosy lavender 1.50
Swaps (New—Yoder Bros.). E. Large yellow florets; compact spike and hard stem. Earlier than War Admiral 3.50	Bold Venture (Yoder Bros.), E. Fuchsia-purple. Long
	stems and spikes
BRONZE	Rockwood's Lavender Rose (Inbred). S. For late spring
Indian Chief (Ball). L. Scarlet-bronze for spring	and summer only
Barbara (J. S. Yoder). M. Large flowered bronze with	MANAGER
pink throat	MIXTURES
• Gallant Fox (Yoder Bros.). M. Medium rosy bronze. Very	Hybrid Formula Mixture. Well balanced blend of Hybrid Snaps
fine 3.50	Ball Forcing Mixture. Inbred or self-pollinated varieties. 1.00
Jubilee (Winkler). M. Light golden bronze. Habit similar to Goldrush	Sweethearts on Parade (New). A formula mixture of dou-
Lady Dorothy (Inbred). E. Bright rosy bronze	ble flowering colors in shades of crimson, yellow, bronze, and white. Satisfactory for spring greenhouse flowering
½ tr. pkt., \$1.75 3.00	during April-May or for outdoor summer culture. Will
Maryland Orange (Winkler). M. Large flowered rosy bronze. Hard stems ½ tr. pkt., \$2.00 3.50	not produce satisfactory winter blooms under glass. ½ tr. pkt., \$1.25; tr. pkt., \$2.00; ½4 oz., \$4.00.

## Our NEW Snap Planning Service

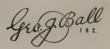
The interest in year-round Snaps has gotten to the point where we feel it merits some steady attention. Therefore we are happy to announce the start of our Snap Planning Service. For some time past we have been intensifying our investigation of scheduling varieties and culture at all seasons of the year, with tests at West Chicago and by gathering information from around the country. Now it is time to distribute this information

If you are interested in year 'round Snaps write us, giving the size and number of beds you wish to schedule for year 'round production. We will do the rest—plan the correct varieties for each season, sowing dates, spacing, culture, and amounts of seed required—and send you a complete schedule. Seeds for your first rotation will come with this schedule, and as each

new rotation comes up new seed will arrive fresh from our controlled-environment storage. Changes in the schedule may be made at any time, and we will notify you when your current program is nearing completion.

We will also be happy to offer scheduling and cultural advice for special crops not on a year-round program.

This Snap Planning Service is one function of our GROWER SERVICE DEPARTMENT, newly created to serve you better. The trained personnel in our Grower Service Department will be glad to offer their assistance with any of your cultural problems. Write this department if you have any questions, and also if you have any complaints that might involve cultural practices.



## BRIEFS ON SNAP CULTURE

#### Soils

Good Snaps can be grown in a wide variety of soils. As a general rule any soil that will grow good Mums will grow good Snaps. The really important point is that it contain plenty of organic matter. While this may take the form of manure, be sure it is well rotted. As a matter of fact, peat is generally preferred because it is more uniform.

The amount of organic matter which a soil needs depends upon its basic structure. Heavy, clay-like soils will need more than loose, sandy sorts. If an average good garden or field soil is to be used, one part of organic matter should be incorporated with each two or three parts of soil. To this should be added three pounds of 20% superphosphate per 100 square feet of bench area before steaming. Other than this we prefer to depend upon regular feedings as soil tests indicate their need rather than to load the soil with too much fertilizer to start with.

#### Sterilizing

We like to steam sterilize our soil before benching, too. It cleans up disease organisms, kills soil-borne weed seeds and insects and tends to improve the soil's physical condition. Low (8 to 10 lbs.) steam pressure does the job for us. Holding soil temperatures at 180° for half an hour after this temperature has been reached is all it takes. After sterilizing, a heavy leaching with clear water will tend to prevent an excessive build-up of nitrates which might injure young roots.

### Seed Sowing

Vermiculite, peat, or soil and peat mixtures all make satisfactory materials for germinating Snap seed. We like to have the flats well watered before sowing, which may be done either broadcast or in shallow rows. We prefer the latter since it permits better aeration after the seedlings get started. No additional soil covering is needed for this fine seed—a light misting with a fine spray will settle it into the soil. If weather is hot or windy, flats should be protected with cheesecloth or paper shade until well up, then they will enjoy full light and a cooler, airy location. Seeds should germinate in 3 or 4 days in summer, 7 or 8 days in winter in a night temperature of 60-65°.

#### Planting

If bench space is available, we like to bench seedlings directless labor and better growth. It works nicely even in hot weather, if the soil is moist before benching, seedlings are planted shallow, and misted within minutes of benching and regularly until new roots show.

In regard to the matter of spacing, we believe 3 x 6 inches is the most economical and profitable for a winter single stem crop with 3 x 5 inches being enough for late spring and summer crops. We space our pinched crops 7 x 8 inches, finding this satisfactory for most varieties. If you are obliged to transplant, band or pot seedlings, do not pinch them until plants have been benched and have taken hold. To pinch before benching will usually result in only two top breaks rather than the four or so that each plant should produce. We like to pinch when plants are about 8 inches high, leaving 3 good pairs of leaves.

#### Summer-Fall Snaps

. are being grown more every season. Direct planted and grown single stem, they flower in a little over two months from benching, and seem to be in good demand. Short growing time means low production costs. For example: some growers sow June Bride in early January, bench seedlings direct in early February, spacing 21/2 x 5 inches, single stem, and cut in early May. February sowings of the same variety flower in early June. Best prices are often obtained in May and June. The Rockwood varieties, Crystal White, Summer Pink, and Summer Yellow, are best adapted for the season from mid-June till early September. Figure on about 31/2 months from sowing until steady cutting on these varieties. Usual spacing is 3 x 5 inches single stem. Do not pinch summer greenhouse Snaps.

#### Sowing Dates

The dates given here are intended as suggestions only—based on our experience here in the Midwest. Various things can throw them off. Examples:

## CHECK LIST FOR GERMINATION TROUBLES



ABSOLUTE NECESSITY — SUNIFORM - NOT EXCESSIVE.



CORRECT TEMPERATURE? - USUALLY 65-70°-SOME PLANTS COOLER.

SEEDS COVERED TOO DEEP? AIR IS AS ESSENTIAL AS HEAT AND MOISTURE!!! FINE SEEDS REQUIRE LITTLE OR NO COVER -WILL "WASH" INTO SOIL.

SUFFICIENT MOISTURE?

ABSOLUTE NECESSITY—

UNIFORM—NOT EXCESSIVE.

ANTS-MICE — MORE
OFTEN RESPONSIBLE
THAN PEOPLE GENERALLY REALIZE - EVEN FLORISTS!

STERILIZED MEDIUM? YOUR SEEDSMAN IS ONLY HUMAN -- DOES HIS BEST. B IF YOU THINK HE IS AT FAULT, WRITE AND GIVE HIM A CHANCE TO HELP!

ABOVE ALL REMOVE SEEDLINGS TO COOL AIR AND PLENTY OF LIGHT AS SOON AS SPROUTED - - BEST DAMP-OFF PREVENTATIVE!

- 1. Hot, dry, bright fall-will bring Christmas crops in early.
- 2. Dark, cloudy fall-winter delays late winter crops.
- 3. The tables are based on medium early varieties on raised benches, 50° night temperatures most of the winter, at least. 45° nights or ground beds will take longer.
- 4. Your local climate. Where winters are warm and sunny, winter Snaps will bloom faster.
- 5. Varieties differ in blooming dates.

#### SINGLE STEM

No-pinch growing seems to be accepted more each year. Reasons:

- A. Quicker crop-gets in 2-3 weeks sooner. Bench cuts out faster, more evenly.
- B. Fewer culls—more uniformity.
- C. Controlled flowering date—by making a succession of properly scheduled sowings, you can be in cut when you want them.

Sow	Flower	Sow	Flower
Aug. 15	Jan. 15	April 1	July 15
Sept. 5	Feb. 15	May 10	Aug. 15
Sept. 20	Mar. 15	June 10	Sept. 15
Oct. 20	April 15	July 10	Oct. 15
Dec. 20	May 15	July 25	Nov. 15
Feb. 5	June 15	Aug. 5	Dec. 15

#### PINCHED CROPS

Wait till breaks are at least an inch long in leaf axils-plant usually about 8 inches high—then pinch to leave 3 pairs of leaves.

Sow	Flower	Sow	Flower
July 20	Mid-Dec.	Sept. 5	Early March
Aug. 1	Mid-Jan.	Sept. 25	Early April
Aug. 20	Mid-Feb.	Nov. 20	Mid-May

#### Temperature

Normal during firing season: nights 50°, cloudy days 57°, sunny days 65°.

#### Varieties

YELLOW: War Admiral, Golden Spike (for spring), Seabiscuit. WHITE and IVORY: Snowman, White Knight, Citation, Spartan White, Rockwood's Crystal White (for summer only), June Bride (for late spring).

PINK: Pink Ice, Christina, Wintergreen, Hercules, Rosebud. MEDIUM ROSE: Rosanna, Showgirl, Jackpot, Libby, Bridesmaid.

DEEP ROSE: New Times.

BRONZE: Gallant Fox, Barbara, Cavalcade.

RED: Navajo, Cherokee.

LAVENDER: Lavender Lady, Bold Venture.

## Outdoor Snaps

## FOR SPRING PLANT SALES

ANNUAL (Antirrhinum majus)

180,000 S. 1-2 weeks 65-75°

If you want bedding Snaps that are in full bloom a week or ten days earlier, that branch and bloom much more freely and are more uniform in color and habit—try "Hit Parade" Hybrids. They're extra nice for cutting, too! The dwarf (Nanum Grandiflorum) type is bushy, with no tendency to sprawl, if not supported. The taller varieties should be supported, if straight stems are wanted.

#### HIT PARADE SNAPS

For all-purpose bedding Snaps, you can't beat these genuine F1 Hybrids, especially adapted to bedding conditions. You'll have earlier flowers and more of them on bushy plants. Ball Orig. Seed.

- Memory. Medium pink.
- Temptation. Crimson-red.
- Stardust. Bright yellow.
- Sophisticated Lady. Lavender.
- Mexicali Rose. Deep rose.
- Harvest Moon. Orange-bronze.
- Bob White. Creamy white.



HIT PARADE MIXTURE

Formula mixture of above colors. Early blooming and plenty of flowers all season.

Prices above 8, each: Tr. pkt., \$1.50; \( \frac{1}{32} \) oz., \$4.75; \( \frac{1}{16} \) oz., \$8.50; 1/8 oz., \$15.50; 1/4 oz., \$28.00.

## BALL 10 BEST INBRED VARIETIES

- Alaska. Long-stemmed white for cutting.
- Canary Bird. Long-stemmed yellow. Good cut flowers.
- Cattleya. Rosy lavender.
- Cherry Red. A bright, rosy cerise-red.
- Copper Queen. Shades of bronzy copper; long-stemmed.
- Crimson (Padre). Deep crimson, valuable for cutting.
- Orange Shades. Bright and showy; not a coppery bronze.
- Pinkie. Lighter than Rosalie; very fine.
- Rosalie. A rich deep rose; fine for cutting.
- Yellow Jacket. Attractive deep rich yellow.
- Improved California Mixture. Mixture of the best tall varieties. Prices above 11, each: Tr. pkt., 40c; ½ oz., 70c; ¼ oz., \$1.25; 1 oz., \$3.75.

COLLECTION: We offer one tr. pkt. each of the 10 Best named varieties above for \$3.60.

#### OTHER VARIETIES

TALL (Maximum). The long-stemmed type for cutting.

Skyscraper Mixture. Pastel shades of ivory, yellow and pink. Tr. pkt., 50c; ½6 oz., \$1.00; ½ oz., \$1.85; ½ oz., \$3.25. Improved California Mixture. See 10 Best.

HALF DWARF (Majestic).

Mixture (Rust-Resistant). Extra large flowered. Tr. pkt., 40e; 1/8 oz., 70e; 1/4 oz., \$1.25; 1 oz., \$3.75.

DWARF (Nanum Grandiflorum). Compact plants for bedding.

Black Prince. Deep velvety crimson.

Gloria. Uniformly dwarf, deep rose-pink. Imported strain.

Golden Queen. Rich golden yellow.

Purity. Large flowered creamy white.

St. George. Flashing orange-cerise.

• Mixture (Rust-Resistant). All colors. Ideal for bedding. Prices above 6, each: Tr. pkt., 50c; 1/8 oz., 85c; 1/4 oz., \$1.50; 1 oz. \$5.50.

TOM THUMB. (4 to 6 in.)

• Magic Carpet. The uniformly dwarf and compact habit of this superior mixture makes it an excellent bedding and border plant. Try some this year for a pleasant surprise. Tr. pkt., 50c; ½ oz., 85c; ¼ oz., \$1.50; 1 oz., \$5.50.



HIT PARADE MIXTURE Extra early, free flowering, bedding Snaps

#### TETRAPLOID SNAPS

Tetraploid Snaps or "Tetras" have larger florets with thicker petals and foliage than the ordinary kind. Under good growing conditions really outstanding spikes can be developed.

Crimson. Bright crimson-red.

Pink. Salmon-pink. Medium tall; huge florets.

Rose. Bright rose.

White. Light creamy white, changing to pure white with age.

Yellow. Tall, base-branching, clear yellow. Long spikes and large flowers.

Prices above 5, each: Tr. pkt., 60c; 1/8 oz., \$1.50; 1/4 oz., \$2.75; 1 oz., \$8.25.

• Giant Ruffled "Tetra" Mixture of all colors. Tr. pkt., 50c; ½ oz., \$1.25; ½ oz., \$2.25; 1 oz., \$6.75.

#### **COLOSSAL SNAPS**

This self-pollinated strain is extra vigorous, producing strong, long-stemmed spikes of large, well formed florets. One of the best outdoor strains for cutting.

White Pink Yellow Mixture Orange

Velvet Giant. The rich, velvety crimson-red flowers of this variety are much larger than most outdoor Snaps, and the spikes

Orchid

Prices above 7, each: Tr. pkt., 40c; 1/8 oz., 90c; 1/4 oz., \$1.75; 1 oz., \$5.00.

#### NEW F2 "PANORAMA" SNAPS=

The following varieties are produced from F<sub>1</sub> Hybrid parents and represent the F2 or second generation. Because of the control exercised over the parents involved in the original cross, the F<sub>2</sub> generation breeds true for color and possesses most of the desirable vigor of a true F<sub>1</sub> Hybrid, but at a lower seed cost.

Lavender Yellow Ivory F<sub>2</sub> Formula Mixture of above colors.

Prices above 6, each: Tr. pkt., \$1.00; 1/8 oz., \$3.30; 1/4 oz., \$6.00; 1 oz., \$18.00.



## Ball COLUMN Stocks

(NON-BRANCHING)

ANNUAL (Mathiola incana)

16,000 S. 2 weeks 65-75°

The most important points in growing good greenhouse Stocks are: (1) plant only in clean soil to avoid root rot; (2) grow them cool-not over 50° nights. A spacing of 3x6 inches is ample for good quality and they may be safely sown in our latitude from July 15 to February 15. Later sowings may come blind. Constant breeding and selection maintain a uniformly high percentage of doubles in our strains, which may be further increased if the largest seedlings are selected in planting or thinning.

Our "6 BEST" greenhouse varieties are dotted ( )

#### WHITE

#### No. 25 MINARET

This fine white combines the close-spaced spike of No. 16 with a larger, longer stem which makes it quite valuable to cut-flower growers. Ball Orig. Seed.

Pacific White. A pure white with large, well spaced florets. A bit later than No. 16 but earlier than Avalanche. Recommended for both greenhouse and outdoor use.

● No. 16 Ball White-Medium Tall. This early pure white is the most popular variety on our entire list. Ball Örig. Seed.

White Giant. Good long-stemmed white for outdoor growing. We prefer our No. 16 Ball White for greenhouse use.

Gardenia Imp. Pure white. Branches somewhat. A fine outdoor

Avalanche. Finest white for outdoor growing; also excellent for greenhouse use although later than No. 16.

#### LAVENDER, BLUE and PURPLE

- No. 1 Lilac-Lavender Improved. Early blooming, silvery lilac. Good stems with long flower spikes. Ball Orig Seed.
- No. 3 Ball Blue Improved. Deep bluish lavender; long spikes. Ball Orig. Seed.
- No. 21 Purple Heart. Long-stemmed and large-flowered, bright violet-purple. Ball Orig. Seed.

#### PINK, ROSE and RED

Pacific Pink. A bright, luminous salmon-rose-pink without the bluish or orchid cast of other pinks and roses. Somewhat later than most Column Stocks, and is at its best in spring.

• No. 22 Ball Supreme. A long-stemmed, vigorous growing variety with fine, heavy spikes of rich silvery rose. Ball Orig. Seed.

No. 11 Ball Pink. A medium pink; somewhat lighter than No. 22. Ball Orig. Seed.

No. 14 Ball Rose. An early flowering, fairly deep rose-pink. Darker in color than Supreme No. 22. Ball Orig. Seed.

No. 9 Chamois-Pink. A warm rosy buff color. Good stems and flower spikes. Ball Orig. Seed.

No. 7 Malmaison Pink, Improved. Long stems and spikes of soft shell-pink. A popular color. Ball Orig. Seed.

No. 6 American Beauty. Rich deep carmine-rose. Ball Orig.

• No. 8 Ruby Improved. A brilliant scarlet-crimson without the purple cast of other reds. Ball Orig. Seed.

#### U.S.D.A. DOUBLE PINK

Improves the Hansen dark-leaved single, light-leaved double strain. Light-leaved doubles may be selected in seedling stage. In our greenhouse trials stem length was greater than Hansen's but not as long as regular Columns. Doubles retain some light leaf color in blooming stage.

#### MISCELLANEOUS VARIETIES

• No. 20 Ball Apricot. Long spikes of rich apricot tinged pink. Ball Orig. Seed.

No. 24 Deep Apricot Improved. Darker than No. 20. Ball Orig. Seed.

No. 17 Gold Standard. Creamy ivory-yellow. Ball Orig. Seed.

No. 26 Butterscotch. This fine, creamy yellow is a definite improvement over present strains in stem length, flower size and color. Ball Orig. Seed.

Yellow Wonder. Popular ivory-yellow for outdoor growing. Branches slightly.

No. 10 Mixture. Our own formula mixture. Ball Orig. Seed.

Prices all above Non-Branching Stocks, each: 1/2 tr. pkt., 75c; tr. pkt., \$1.25; ¼ oz., \$2.75; ½ oz., \$5.25; 1 oz., \$10.00.

COLLECTION: 1 tr. pkt. each of the 6 Best (dotted) varieties. for \$6.75.

## BRANCHING STOCKS

## Hansen's ALL-DOUBLE Select Stocks

Light leaved doubles and dark leaved singles-apparent in the seedling stage at 50°-provide a positive means of separating singles from doubles in this strain. Stems are about one-half as long as the regular Ball type Column Stocks.

BRANCHING

Dwarf Park Mixture. A dwarf branching type of the All-Double Select Stocks described above. For outdoor bedding in cooler temperatures.

Prices above 9, each: Tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$4.00.

Tr. pkt., 75c;  $\frac{1}{16}$  oz., \$1.20;  $\frac{1}{4}$  oz., \$4.00; 1 oz., \$12.00.

Apple Blossom. Pale delicate Blood-Red. Ruby-red. Chamois. Chamois or buff.

Elk's Pride. Rich purple. Santa Maria. Best branching

GIANTS OF CALIFORNIA (Improved Bismarcks) Golden Ball. Ivory-yellow. Lavender. Lilac-lavender. Rose, Bright rose-pink. Formula Mixture of above colors.

#### TRYSOMIC HI-DOUBLE STOCKS

An unusual race of branching Stocks which makes use of scientific plant breeding principles to produce 80-85% double flowering plants.

Canary-Yellow Bright Rose Chamois. Buff-pink. Fiery Red Lilac-Lavender Navy-Blue Trysomic Hi-Double Mixture

Prices above 8, each: ½ tr. pkt., \$1.00; tr. pkt., \$1.75; ½ oz., \$2.90; ¼ oz., \$5.00.

#### TRYSOMIC 7-WEEK MIXTURE

1 ft. Blooms outdoors during hottest weather. Complete color range.  $\frac{1}{2}$  tr. pkt., \$1.00; tr. pkt., \$1.75;  $\frac{1}{8}$  oz., \$2.90;  $\frac{1}{4}$  oz., \$5.00; 1 oz., \$18.00.

#### **DWARF TEN WEEK**

Makes very attractive pot plants.

Blood-Red Lavender Canary-Yellow Deep Rose Purple White Formula Mixture Prices above 8, each: Tr. pkt., 30c; 1/4 oz., \$1.00; 1 oz., \$3.00.



## STOKESIA (Stokes' Aster)

PERENNIAL (S. cyanea) 3300 S. 4-6 weeks 65-75° Cyanea. 20 in. Large blue flowers. Tr. pkt., 35c; ½ oz., \$1.00.

## **STRAWBERRY**

ANNUAL (Fragaria vesca) 90,000 S. 2-3 weeks 55-65°

Harzland. Small red fruits on fairly compact runnerless plants.

A nice pot novelty. Tr. pkt., 50c; 1/16 oz., \$1.50.

## STRELITZIA (Bird of Paradise)

ANNUAL (S. reginae) 140 S. 3-4 weeks 65-75° Regina. Exhibition strain. Giant flowers of dark blue and deep orange. 10 seeds, \$1.25; 100 seeds, \$10.00.

## STREPTOCARPUS (Cape Primrose)

ANNUAL (S. hybridus)

750,000 S. 2-3 weeks 65-75°

#### • WIESMOOR HYBRIDS =

Fringed, Orchid-like flowers 4 to 5 inches across in a bright array of colors, including shades of pink, red, blue, lilac and white. Sow from October to March for cut flowers or pot plants from April to December.

Originator's tr. pkt., \$1.25; 5 tr. pkts., \$5.25.

Sunflower. See Helianthus, page 26.

#### **SWEET PEAS**

See page 62.

#### **THERMOPSIS**

PERENNIAL (T. caroliniana) 6500 S. Frost germinator Caroliniana. 3 to 5 ft. Long panicles of yellow, Pea-shaped flowers. Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.35.

## THUNBERGIA

ANNUAL (T. species) S. See below 2-3 weeks 65-75°

• Alata (Black-Eyed Susan). 1100 S. Excellent used as a climber or as a trailing plant for porch boxes and urns. Makes a dense growth producing an abundance of flowers in shades of yellow, buff and orange—with black center or "eyes."

Tr. pkt., 35c; ½ oz., 60c; 1 oz., \$1.80.

Gibsoni. 500 S. Flowers of a solid, deep orange are twice the size of Alata. 100 seeds, \$1.75; 1000 seeds, \$15.00.

#### TITHONIA

ANNUAL (T. rotundifolia) 3500 S. 2-3 weeks 65-75°

Torch. Torch 3 ft. Single, bright orange-scarlet flowers with yellow discs are carried on erect, bushy plants. Makes a good cut flower. Stands heat well.

Tr. pkt., 40c; ¼ oz., \$1.50; 1 oz., \$4.50.

Tobacco Plant. See Nicotiana, page 34.

#### TORENIA

ANNUAL (T. Fournieri)

375,000 S. 2 weeks 65-75°

An excellent plant for spring combination use or for bedding in semi-shade and shade. Sow several weeks ahead of other bedding plants

• Fournieri Grandiflora. 12 in. Rich, deep blue with violet and yellow blotch on lip.

Fournieri Compacta, Blue. 8 in. A dwarf form of the above.

Fournieri Compacta, White. 8 in. Dwarf white.

Prices above 3, each: Tr. pkt., 40c; ½ oz., \$1.25; ¼ oz., \$2.25.

#### TRITOMA (Red Hot Poker)

PERENNIAL (Kniphofia Uvaria) 20,000 S. 3-4 weeks 65-75° Attractive long spikes from late summer until frost. Dig and store roots over winter in north, 3 to 4 ft.

• Pfitzer's Red. Large brilliant red

Mirabilis. Yellow and orange shades.

Prices above 2, each: Tr. pkt., 45c; 1/4 oz., 80c; 1 oz., \$2.40.

## TROLLIUS (Globe Flower)

PERENNIAL (T. species)

8000 S.

Allow seed to stand outdoors over winter for good germination or soak in hot water 30 minutes before sowing. Plants require moist soil.

**Ledebouri, Orange.** The standard variety. 2 ft. tall. Tr. pkt., 60c; ½6 oz., \$1.25; ½ oz., \$2.25.

Mixture. Beautiful variations in both form and shades.

Tr. pkt., 40c; ½ oz., \$1.50; ¼ oz., \$2.70.

### **VERBENAS**

ANNUAL (V. hortensis)

10,000 S. 3-4 weeks 65-75°

One of the most colorful and showy plants for bedding, window boxes or combinations. Seed should be sown in a soil temperature of 65° to hasten germination which is sometimes slow. Once established, 50° nights suits them nicely, but be sure to pinch the taller varieties early to avoid straggly growth.

SPREADING. Growth is inclined to be procumbent or carpet-like, covering a fairly wide area.

SMALL SPREADING. Height 8 to 12 inches.

# Sixteen

#### • IDEAL FLORIST STRAIN =

(Dwarf Masterblend). Low growing, but spreading in habit with large flowers in an extremely wide range of unusual colors —many attractive light eyes. Early and

free flowering. Fine for flat sales.

Tr. pkt., 75c; ½ oz., \$2.00; 1 oz., \$6.00.

**Delight** (New). Coral-pink, suffused salmon. A welcome addition to this increasingly popular class of dwarf Verbenas. Tr. pkt., 75c; ¼ oz., \$2.00; 1 oz., \$6.00.

• Sparkle. Bright red with white eye.

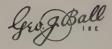
Crystal. Large flowered, snow-white.

Sparkle Mixture (New). Plants of the same type as Sparkle and Crystal in a complete range of colors, mostly with white eyes.

Prices above 3, each: Tr. pkt., 50c; ½ oz., \$1.50; 1 oz., \$4.50.

SPREADING. Similar in habit to Small Spreading but reaches a height of 12 to 18 inches.

- Torrid. Deep red with contrasting white eye. Bred in the Middle West for heat resistance, and blooms freely under trying conditions. Ball Orig. Seed.
  Tr. pkt., 60c; ⅓ oz., \$1.65; ⅙ oz., \$3.00; 1 oz., \$9.00.
- Defiance. According to our trial ground observations the most vigorous and free flowering of all the solid scarlet-red Verbenas. Stands heat well. Tr. pkt., 45c; ½ oz., \$1.25; 1 oz., \$3.75.



#### VERBENAS, Continued

• Beauty of Oxford. Extra large flowers, ranging from clear rosepink to deep rose-red, all with slight white eye.

Dannebrog. Very attractive bright scarlet with large white eye. Ellen Willmott. Extra large, salmon-pink.

Lavender Glory. Very fine, large flowered lavender with white eye. About 75% true to type, balance white and purple.

• Marilyn. Fiery scarlet-cerise with creamy eye. Free flowering and compact.

Mayflower. Shades of pink.

• Pure White. Very even strain. Large flowered and vigorous.

• Royale. Large flowered, rich, deep blue with eye. Spectrum Red. Very bright rich scarlet with no eye. Sutton's Blue. Deep Royal blue without eye.

Mixture of all colors in the Grandiflora class.

Prices above 11, each: Tr. pkt., 45c; \( \frac{1}{4} \) oz., \$1.25; 1 oz., \$3.75.

UPRIGHT. Free branching but distinctly bushy and upright in habit rather than spreading.

DWARF UPRIGHT. Height 4 to 8 inches.

Fireball. Bright, fiery scarlet, small flowers.

• Mixture of all colors in this compact class.

Prices above 2, each: Tr. pkt., 50c; \(\frac{1}{4}\) oz., \$1.50; 1 oz., \$4.50.

UPRIGHT. Height 8 to 12 inches.

Firelight. A vivid, solid red. Tr. pkt., 55c; ½ oz., \$1.30; 1 oz., \$4.00.

• Giant Salmon Queen. Large flowered, bright coral-salmon.

Starlight. Large flowers are a rich mid-blue with ivory-white eye. An excellent companion to Salmon Queen.

Blue Sentinel. Bright blue with very little violet shading. Snowball. Fine, free flowering pure white.

Prices above 4, each: Tr. pkt., 55c; 1/4 oz., \$1.30; 1 oz., \$4.00.

- Rainbow Mixture. Semi-dwarf (8 to 10 in.), but upright growing plants in a wide assortment of colors. Its earliness and erect habit make this strain valuable for pots and combination boxes as well as for borders.
- Royal Bouquet. 12 to 14 in. A mixture of all colors in this upright type. Stems are long enough for limited cut flower use.

Prices above 2, each:

Tr. pkt., 55c; ¼ oz., \$1.65; 1 oz., \$5.00.

MISCELLANEOUS VARIETIES

Venosa Lilacina. 60,000 S. 8 to 10 in. Flowers continuously throughout our hot Midwestern summers. Deep lilac flowers. Tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.00.

## **VERONICA** (Speedwell)

PERENNIAL (V. spicata) 250,000 S. 2 weeks 65-75° Spicata, Dwarf Blue Shades. 16 in. Showy, easily grown plants; brightly colored. Tr. pkt., 35c; 1/4 oz., 90c; 1 oz., \$2.70.

## VINCA (Periwinkle)

ANNUAL (V. rosea) 21,000 S. 2-3 weeks 65-75° One of the most generally satisfactory outdoor bedding plants we have. Will stand an almost unbelievable amount of hot, dry weather. Sow early with bottom heat and grow warm. 15 in.

#### ● COQUETTE ==

More compact and shapely than the regular Vinca varieties. Coquette will grow only 10 inches tall, is very uniform, and should be an ideal bedding plant, be-

cause it is tolerant of hot and dry summers. Color is rosy pink with attractive, glossy deep green leaves. Very free flowering and will bloom continuously from Decoration Day till frost if seed is started February 1 with bottom heat. Tr. pkt., 45c; ¼ oz., \$1.35; 1 oz., \$4.50.

#### VINCA, Continued

• Twinkles. Soft pink; red eye.

• Pink. Medium pink.

Crimson

Alba Oculata. White; red eve.

Mixture.

Alba Pura. Pure white.

Prices above 6, each: Tr. pkt., 30c; ¼ oz., 60c; 1 oz., \$2.00.

### VIOLA

24,000 S. 2-3 weeks 65-75° PERENNIAL (V. cornuta) Miniature Pansies. Extra free flowering and effectively used for bedding. Perfectly hardy. 8 in.

Firmament. Free blooming, clear sky-blue.

Jersey Gem. Deep orchid; large flowered and attractive.

Prices above 2, each: Tr. pkt., 60c; 1/16 oz., \$1.10; 1/8 oz., \$2.00; ½ oz., \$6.00.

Apricot. See Chantreyland.

- Arkwright Ruby. Maroon with dark center. Bright color.
- Blue Perfection. Large flowered clear medium blue.
- Chantreyland. Extra large flowered true apricot.
- Lutea Splendens. Clear golden yellow.

Papilio. Blue and white combinations. Extra dwarf and free flowering.

Puck. Yellow and purple.

• White Perfection. Small pure white.

Scottish Mixture. Mostly solid colors in shades of white, yellow, blue and purple. Larger blooms than our Large Flowered Mix-

 Large-Flowered Mixture. Mixture of large-flowered varieties. Prices above 10 varieties, each: Tr. pkt., 60c; ½ oz., \$1.10;  $\frac{1}{4}$  oz., \$2.00; 1 oz., \$6.00.

#### "JUMP-UPS"

43,000 S. These small, but free flowering Violas make excellent bedding and rock garden plants, blooming continuously from early spring to late fall.

Black Imp (Nigra). Small, velvety, coal-black flowers.

- Blue Elf (Improved Johnny-Jump-Up). Three-colored blooms of deep violet, light blue and gold are freely produced on lowgrowing plants.
- Helen Mount. A richly colored combination of violet, lavender and canary-yellow. Very free-flowering with narrow bushy fo-

King Henry. Rich violet-blue with lavender center; yellow eye. Prices above 4, each: Tr. pkt., 60c; ½ oz., \$1.35; ½ oz., \$2.50; 1 oz., \$7.50.

ODORATA. 9000 S. The popular fragrant "English Violet."

Semperflorens. Deep blue.

Tr. pkt., 60c; ¼ oz., \$2.00; 1 oz., \$6.00.

## WALLFLOWER

ANNUAL (Erysimum) 2 weeks 65-75° Good bedding plant in cool climates. Also cuts. 2½ ft. Sow in December and grow in shallow soil (flats are fine) spaced 4x4 for spring cutting.

Gold Standard. Richly fragrant deep golden yellow flowers borne in spikes. Tr. pkt., 65c; ¼ oz., \$2.25; 1 oz., \$6.50.

Perennial Wallflower. See Cheiranthus, page 15.

## **YUCCA** (Spanish Bayonet)

PERENNIAL (Y. aloifolia) 1800 S. Frost germinator Hardy Varieties, Mixture. Striking plants of exotic appearance. Many varieties are included in this blend. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.



ZINNIA, GIANT CACTUS

### **GIANT CACTUS**

2 to 3 ft. This class, with its large informally curled and ruffled petals is rapidly increasing in popularity each year.

• Ice Cream. A completely different color in Zinnias. A rich, full bodied cream—not a light yellow. Blends with all other colors. Large, fully double flowers with ruffled petals.

Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

Apricot. Large double flowers of coral suffused apricot, with lacy, ruffled petals.

Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz.. \$3.75; 4 ozs., \$12.50.

● Blaze. WIEMERON A brilliant combination of fiery mandarin-red and scarlet-orange. Unique and distinct. Tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$9.00.

Eskimo. Large, loosely ruffled flowers open creamy white, turning a clear white with age.

• Floradale Scarlet. Large, fully double scarlet flowers with lacy, ruffled petals.

Riverside Beauty. Large, double, soft coral-rose color with lacy, ruffled petals.

• Sunny Boy. Large buttercup-yellow flowers.



#### **● CACTUS FLOWERED MIXTURE**

Pictured above. One of our finest Zinnias. Extra large, fully double flowers with large ruffled petals. A nicely balanced mixture of colors, mostly pastels.

◆ Treasure Island. This new strain is an F₃ with Hybrid vigor and large, fluffy, informal flowers up to 7 inches across in a wider range of colors than ever before. Plants grow about 3 feet tall. We consider this the finest Cactus-Flowered Zinnia mixture obtainable.

Prices above 6, each: Tr. pkt., 40c; ¼ oz., 75c; 1 oz., \$2.50; 4 ozs., \$7.50.

Miss Universe (New). The originator describes this new Zinnia as "the largest Zinnia I have ever seen. Deep, full flowers in a complete color range, with a bushier, more compact habit than the taller, weedier, older Zinnias." Not a true Cactus type. Tr. pkt., 40c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

## Florists'

ANNUAL (Z. elegans) 2500-4000 S. 1-2 weeks 75-85° Sow only 4 to 6 weeks ahead of sales for bedding. For summer cuts sow direct in warm soil; flowering will begin in 7-8 weeks.

#### **CUPID TYPE**

Dwarf, 12-in. plants producing large numbers of small double (1-in.) flowers. Fine for borders and rock gardens.

Goblin. Bronzy orange.

Pixie. Deep yellow.

Snowdrop. Pure white.

Red Riding Hood (Gracillima). Bright crimson.

Mixture

Prices above 5, each: Tr. pkt., 50c; 1/4 oz., \$1.50.

#### **PUMILA TYPE**

"CUT-AND-COME-AGAIN." Between the Giants and Lilliputs in flower size and height.

Canary-Yellow Salmon-Rose Pinkie. A pleasing soft pink. Fireball. Scarlet.
Snowball. White.
Mixture of all colors.

Prices above 6, each: Tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.50; 4 ozs., \$5.00; 1 lb., \$15.00.

## MISCELLANEOUS VARIETIES

Linearis. A heat-resistant, free-blooming subject for edging and rock garden work. Compact (6-8 in.), early flowering with single, bright orange flowers. Tr. pkt., 50c; ½ oz., \$1.50; 1 oz., \$4.50.

- Peppermint Stick. Bright and varied colors in shades of red, white, yellow, pink, orange and purple more than half of which are attractively striped.
   Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.25; 4 ozs., \$7.00.
- Ortho-Polka. Similar to Peppermint Stick but larger flowered. Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50
- Persian Carpet. VIAMENTAL 16 in. Compact plants literally covered with medium small flowers in variegated shades of maroon, gold and orange. Especially valuable for bedding. Tr. pkt., 50c; ½ oz., \$1.50; 1 oz., \$4.50.

Fantasy Mixture. Formula mixture of all colors in this class. The medium sized flowers have informally curled and twisted petals which produce an attractive novelty effect. Tr. pkt., 30c; ½ oz., 60c; 1 oz., \$1.80.

#### NOTES ON ZINNIA CULTURE

For Bedding: Always popular for their ease of culture and fine, vivid colors, Zinnias should account for a substantial part of your bedding sales. Because they are rapid growers, seed should not be sown until about a month before your bedding plant selling season starts.

For Cutting: Some protection by cloth or a greenhouse will produce long-stemmed, large-flowered Zinnias which make excellent cut-flower material. Either the Dahlia-Flowered or the Lilliputs are O. K. for this. Sow direct in warm soil, flowering will begin in 7 or 8 weeks. An outdoor sowing as late as July 1 in our latitude will produce a fine crop of cut Zinnias before frost.

Warning: Zinnias are native to warm climates and need 65° minimum to germinate and grow satisfactorily.



## Zinnias

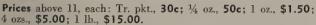
### LILLIPUTS

18 in. Lilliput Zinnias never fail to attract attention as a bedding subject because of their interesting flower formation and free-flowering habit. For cut flowers, the stems can be lengthened somewhat by cloth or greenhouse shading. Flowers about the size of average button-type Pompons.

- Canary Gem Crimson Gem Golden Gem
- Pink GemLilac GemPurple Gem
- Salmon GemScarlet GemWhite Gem
- Rosebud. Fine rose-pink.

• FORMULA MIXTURE

Popular mixture of all colors in the Lilliput class. Pictured at right.



**COLLECTION:** Tr. pkt. of each of the 10 named Lilliput varieties for \$2.70.





LILLIPUT MIXTURE

## DAHLIA-FLOWERED or GIANT MAMMOTH

#### WHITE and CREAM

Isabellina. Creamy yellow.

• Purity (Polar Bear). The best white in large-flowered Zinnias.

### YELLOW and GOLDEN

- Canary Bird (Daffodil Imp.). A bright, clear canary-yellow.
- Golden Dawn (Golden Queen). Clear golden yellow. Extra large flowers.
- Oriole (Orange King). Orange and gold.

#### LAVENDER and PURPLE

Dream (Lavender Queen). An attractive lavender.
 Purple Prince (Violet Queen). Deep purple; large-flowered.

#### PINK and ROSE

• Exquisite (Enchantress). Fine, light rose with deep cerise center. Illumination (Rose Queen). Deep rose, dark center. Darker than Exquisite.

Luminosa (Brightness). Bright pink suffused with salmon. Miss Willmott. Pleasing, soft pastel pink.

Salmon Queen (Eldorado). Luminous salmon-rose.

#### **RED** and **SCARLET**

Cherry Queen. Brilliant cherry-rose.

 Crimson Monarch. Large-flowered, deep crimson-red. Meteor. Rich, deep amaranth-red. A striking color.

• Scarlet Flame (Will Rogers, Scarlet Queen). Bright scarlet.

#### MIXTURES

#### GOLD MEDAL MIXTURE

Sixteen

We believe this is the finest complete mixture of large-flowered Zinnias available. This is not a field-grown mixture, but it is carefully blended by

formula from first class cut-flower colors and varieties in direct proportion to their commercial value.

- Indian Summer Mixture. Bright reds, yellows and oranges predominate to make this fine assortment of "Indian Summer" colors.
- Pastel Shades Mixture. A formal mixture of the lighter colors in the large-flowered class.

Giant Mammoth Mixture. A balanced formula mixture of all Giant Mammoth varieties.

Prices all Dahlia-Flowered Zinnias, each: Tr. pkt., 30c; ½ oz., 50c; 1 oz., \$1.50; 4 ozs., \$5.00; 1 lb., \$15.00.

**COLLECTION:** We furnish a collection consisting of 1 tr. pkt. each of these 16 varieties for \$4.30.

Creeping Zinnias. See Sanvitalia, page 51.

## Ball Sweet Peas

ANNUAL (Lathyrus odoratus) 350 S. 2 weeks 65-75°

#### WINTER PEAS

#### ZVOLANEK'S MULTIFLORAS

Originator's Seed

These fine varieties are the result of years of painstaking selection on the part of William Zvolanek, veteran California Sweet Pea breeder. They are unusually free flowering and long-stemmed with many stems carrying 5 and 6 flowers instead of the usual 3 and 4. Sow from mid-July through November for blooms November through May.

Blue Wonder. Fine, clear medium blue flowers on very long, strong stems.

Deep Rose. Deep, bright rose; fine for spring. Long stems, and vigorous growth.

• GEO. J. BALL =

Named for the late Geo. J. Ball, this new, deep coral-rose is one of the finest Multiflora Sweet Peas.

Giant Lilac. Bright mauve, same color as Triumph. Large flowers on extra long, heavy stems. Strong growth.

• Lavender. Orchid-lavender, near Twilight in color. A strong grower with extra long stems.

Light Rose-Pink, Almost flesh-pink in color, Large flowers on long stems.

Orange-Cerise. Extra large flowers on long stems. A bright and striking color.

Red. Christmas red.

• Rose. Extra large, medium rose flowers on extra long, heavy stems. Vigorous growth.

• Salmon-Pink. Large, medium rose-pink flowers with salmon cast. Stems extra long, but not as heavy as the other varieties in this class.

Whirlwind. Large, light rose flowers on long stems.

• White. Pure white. Long, strong stems.

Multiflora Mixture. A complete color assortment.

Prices above 13 varieties, each: ½ oz., \$1.10; 1 oz., \$2.00; 4 ozs., \$6.65; 1 lb., \$20.00.

#### STANDARD WINTER VARIETIES

These varieties are at their best during winter and early spring from a July to September sowing. While we prefer the Spring Flowering for late greenhouse planting, the Winter class does flower earlier and in some sections is preferred even for outdoor planting. The 12 best varieties are indicated by a ( ).

#### PINK, ROSE and SALMON

- Ball Rose Queen. Clear rose-pink. Ball Orig. Seed.
- Ball Rose Supreme. Silvery rose. Ball Orig. Seed.
- Ball Salmon. Medium salmon. Ball Orig. Seed.
- Daphne. Soft salmon-pink on cream. Large flowered.
- Hiawatha. Strong growing, large flowered deep rose.
   New Ball Rose. Fine where headroom is limited.

#### ORANGE and RED

- Ball Orange Supreme. Clear orange, Ball Orig, Seed,
- Fiesta. Brilliant scarlet-cerise; the finest winter red.
   Treasure Island. Large, wavy flowers of golden orange.

#### WHITE

Ball White. Pure white; white seeded. Ball Orig. Seed. • Cascade. Earliest large flowered white; white seeded. Hope. Fine black seeded white.

### LAVENDER, BLUE and PURPLE

• Ball Blue Supreme. Rich mid-blue. Ball Orig. Seed. Harmony. Early flowering lavender.

- Rhapsody. Extra large flowered, deep rosy lavender. Top Hat. Deep bright violet-blue.
- Triumph. Long-stemmed, rich lilac-mauve; very well liked.
- Twilight. A bright clear lavender.
- Prices all Standard Winter varieties, each: ½ oz., 35c; 1 oz., 55c; 4 ozs., \$1.65; 1 lb., \$6.00.
- 12 Best Mixture. Our own formula mixture of the 12 best (dotted) varieties.

 $\frac{1}{2}$  oz., 35c; 1 oz.. 55c; 4 ozs., \$1.65; 1 lb., \$6.00.

### SPRING PEAS

#### CUTHBERTSON STRAIN

Originator's Seed

This class is midway in blooming date between the Winter and Summer types, and is the preferred kind for spring greenhouse flowering. Don't sow before October for this purpose. They are also widely planted for outdoor use, being a week or two earlier than the Summer class and more heat resistant.

- Billy. Bright cerise-rose on salmon; very showy.
- Carol. Attractive clear pink on white ground; salmon shading. Evelyn. Extra long-stemmed, soft salmon-pink.
- Lois. Light rose-pink, similar in color to Ball Rose Queen. Kenneth. Deep crimson-red.
- Jimmy. Rich, deep cherry-red.
- Frank G. Fine soft rosy lavender. One of the best.
- Tommy. Clear mid-blue. A popular commercial color. Daisy. Large frilled white; black seeded.
- Mixture. Balanced according to demand for each color.

Prices above 10 Cuthbertson varieties, each: ½ oz., 35c; 1 oz., 55c; 4 ozs., \$1.65; 1 lb., \$5.00.

#### **DWARF SWEET PEAS**

Little Sweethearts Mixture. Plants are upright and form rounded bushes about 8 in. high covered with large flowers in all shades. Needs no support and is suitable for borders or bedding. Originator's Seed. 1/4 oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$10.00.

#### ZVOLANEK'S FLORIBUNDAS

Originator's Seed

Developed from the sensational Multifloras, the Floribunda Class is a spring flowering Sweet Pea. It branches freely with long, strong stems, as many as 6 and 7 blooms, and has other fine characteristics of the Multiflora line. Our trials definitely indicate that the Floribundas are superior to other strains for spring greenhouse or outdoor use in our locality.

- Pure White Rose-Pink
- Mid-Blue
- Scarlet Lilac

- Light Pink
- Carmine-Rose
- Mixture

Prices above 9, each: ½ oz., 85c; 1 oz., \$1.50; 4 ozs., \$5.00; 1 lb., \$18.00.

#### SUMMER PEAS

The standard class for outdoor use. Sow in bands or pots in late winter. Grow cold after germination and plant out in early spring as soon as soil can be worked.

- Ball Shrimp-Pink. A pleasing soft shrimp-pink.
- Pinkie. Finest large flowered rose-pink.
- Welcome. An intense sunproof scarlet.
- Snow White. The finest clear white; black-seeded.
- King Lavender. Exceptionally fine, clear even lavender.
- Windsor Blue. A supremely fine mid-blue.
- Ball Best Mixture. Composed only of the best varieties. Prices all above Summer Peas, each: ½ oz., 25c; 1 oz., 40c;

4 ozs., \$1.25; 1 lb., \$4.00.



## Vegetable Seeds for Florists

Our vegetable seeds are of the same superior quality as our flower seeds. Don't miss out on the increased sale of vegetables this spring. With home building and the sale of home freezers at a national all-time peak, the demand for vegetables for "back-yard" planting should reach a comparable all-time high level. BE READY!



The Jiffy-Pot symbol marks the varieties best suited for plant sales. We recommend growing them in Jiffy-Pots for superior quality and more profit; however, they may be grown in Veneer Bands, Market-Paks, or other containers listed on pages 68-76.



#### BEANS

Bountiful. 47 days. Green bush		1 lb. <b>\$0.60</b>	
Golden Wax. 51 days. Yellow bush	25	.60	2.50
Stringless Green pod. 53 days	25	.60	2.50
Top-Crop. 48 days. New, green pend pod	25		2.50 2.50

#### BEETS

(1 oz., for 60-ft. row). Sow when ground can be we successive sowings until July. Space rows 18 in		
seeds in Ball Bands for plant sale.  1 oz.  Detroit Dark Red. (Improved Strain) \$0.25	4 ozs.	
BEET GREENS as well as globular roots25	.60	1.80
Extra Early Flat Egyptian. Earliest and best for forcing or home gardens	.60	1.80

### **BROCCOLI**

(About 10,000 seeds per oz.) Sow in 36x24 in.	March.	Space	plants
	l oz.	4 ozs.	1 lb.
Green Sprouting. Valuable all-season "cut and come again" strain for home garden			
or market	\$0.40	\$1.35	\$4.00
De Cicco. 60 days. Earliest to mature	.60	2.00	6.00

## **BRUSSELS SPROUTS**

HHYPOT	(Abo	ut 7000	seeds	per o	z.) Sow	in M	arch.	Space 36	x18 in.
Julypot							l oz.	4 ozs.	1 lb.
U	Long	Island	Imp	. 90	days.	Stem			
closel		with :							
								\$2.00	\$5.00

#### CABBAGE

(Danish Grown)

(About 7000 seeds per oz.) Sow in Feb.-March for the first crop and in June for a fall crop. Space earlies 24x18 in., late 36x20 in.

YELLOWS	RESISTANT	VARIETIES
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YELLOWS RESISTANT VARIETIES		
In order of maturity.		
	4 ozs.	1 lb.
Jersey Queen. 63 days. The resistant Jersey	62.00	£
Wakefield. Heads are solid, conical\$0.60	\$2.00	\$6.00
Golden Acre Resistant. 65 days. Resistant		
Golden Acre type. Medium small, round		
	2.50	7.50
Marion Market. Heads a little later and		
1 0 1	2.00	6.00
Racine Market. 65 days. Large round		
	3.00	9.00

#### CABBAGE, Continued

	l oz.	4 ozs.	1 lb.
Wisconsin All-Season. Good winter keep-			
er; large, flat, hard heads	\$0.90	\$3.00	\$9.00
Bugner, 100 days. Round heads; average			
10 lbs. 8 inches diameter. Excellent	.90	3.00	9.00
Wisconsin No. 8. Resistant Hollander	.60		6.00
STANDARD VARIETIES	S		
In order of maturity.			
Early Jersey Wakefield. Pointed heads.			
Plants small, allowing close planting	45	1.50	4.50
Golden Acre. Extra early. Round heads,		1.50	7.50
short stems, 64 days. Uniform, firm; ma-			
tures evenly	.60	2.00	6.00
Copenhagen Market. A very choice strain.			0.00
Medium-sized heads: compact	.60	2.00	6.00
Charleston. (Large Wakefield.) Heart-			
shaped, average weight 4-5 lbs	.45	1.50	4.50
Early Dwarf Flat Dutch. Heads nearly			
round, firm; fine flavor and high quality	.45	1.50	4.50
Late Flat Dutch. Good keeper, firm heads	.60	2.00	6.00
Danish Ballhead. Penn State Strain			
(Short Stem.) Best late variety, heads			
large, flat, solid; keeps until late spring.			
105 days	.75	2.50	7.50
SAVOY and RED CABBA	.GE		
Chieftain. 85 days. Heads medium large;			
flat and firm. Crimped leaves	.60	2.00	6.00
Mammoth Rock Red. Best red variety	.60	2.00	6,00

#### CARROT

		the ground can be worked
	plantings until A	ug. 1st. Space rows 12 to
18 in.		1 oz. 4 ozs. 1 lb.

Amsterdam Forcing. Roots reddish orange,		
6 in., uniformly tapered. Earliest\$0.35	\$1.20	\$3.60
Danvers Half Long. Tapering30		
Gold Pak. All-America Winner. Long and		
smooth (8 to 10 inches), bred especially		
for commercial growers	1.40	4.20

#### CAULIFLOWER

(About 7000 seeds per oz.) Sow Feb-March. To insure unchecked growth and sure heading, plants should be handled in plant bands or pots. Space 18x24 in.

Danish Giant Dry Weather. Select. 70 days. Early Snowball "A." 55 days. Standard early. Fine for green-

house forcing, frame or outdoor culture.

Snowball "X." 65 days. Well adapted for use under a wide range of conditions. Heads large, firm and pure white. Snowdrift. 65 days. Larger than Snowball; firm and well

protected by inner leaves. Good for distant shipping. Prices of above 4, each: Tr. pkt., 40c; 1/4 oz., 80c; 1 oz., \$2.40;

4 ozs., \$8.00; 1 lb., \$24.00.



## Vegetable Seeds for Florists (Continued)

#### CELERY

(About 8000 plants per oz.)

(About 8000 plants per oz.) Sow in Feb. or March for plant sales. Cover seeds lightly. Space 6x28 in. Days indicated are from date of planting.

Golden Plume. Non-bolting. Select. 85 days. Desirable for home and market garden.

Golden Yellow Self-Blanching. Cornell No. 19. Long, deeply rounded stalk. Yellows resistant.

Summer Pascal. 110 days. Uniform, thick, rounded stalks. Better than Giant Pascal. Crisp green.

Prices above 3, each: ½ oz., 85c; 1 oz., \$1.50; 4 ozs., \$5.00.

#### CHIVES

(Grass-Onion). A perennial, quickly started from seed. Popular for flavoring and borders.

1/4 oz., 30c; 1 oz., 90c; 4 ozs., \$3.00; 1 lb., \$9.00.

CORN	4 ozs.	1 lb.	5 lbs.
Golden Bantam. 79 days	30	\$0.60 .75	\$2.70 3.35
Foremost Hybrid No. 1. THYBRID 67 days. See below	区 35	.90	4.00
REGULAR VEGETABLES CONTINU	ED NEX	T PAG	Ε

## F1 Hybrid Vegetables

### CUCUMBER

Ball Early Hybrid. Heavy yielder. Size similar to "Straight 8", color dark green. It is a white spined, slicing type, earlier than Burpee Hybrid. Resistant.

Tr. pkt., 50c; ½ oz., \$1.40; 1 oz., \$4.20; 4 ozs., \$12.50. Seedless Supreme. Best of the European forcing types. Will outyield any outdoor variety we know. Form 12-14 in. fruits without pollination, is seedless unless pollinated. Dark green, disease-resistant, very prolific when forced in high humidity at 75-85° terperature. 100 seeds, 50c; 1000 seeds, \$4.50.

**CORN** 4 ozs. 1 lb. 10 lbs.

Golden Cross. 85 days ......\$0.30 \$0.75 \$3.35

## **EGGPLANT**

Beauty Hybrid. Our trial ground proved this new Ball Hybrid to be considerably earlier and more productive than the regular Black Beauty. Fruits are a little more oblong and are produced on strong, erect plants.

TOMATOES

Ball Extra Early. 55 days. An F<sub>1</sub> Hybrid earlier than Earliana. Medium fruits, extremely smooth. Bred for highest quality fruit and earliness. Record yields.

Tr. pkt., \$1.00; ½6 oz., \$2.25; ¼ oz., \$7.50; 1 oz., \$25.00. Ball Giant Hybrid. 65 days. Early, red large fruits. The addition to our F<sub>1</sub> Hybrid Tomatoes we have been looking for. An excellent producer of fine, solid red fruits. It is about two weeks later than our Ball Extra Early. Tr. pkt., \$1.40; ½6 oz., \$3.20; ¼ oz., \$10.65; 1 oz., \$32.00.

Burpee Hybrid. Medium sized; average 8 ounces in weight. Tr. pkt. (150 seeds), \$1.00; ½ oz., \$3.50; ¼ oz., \$6.00; ½ oz., \$11.00; 1 oz., \$20.00.

Burpee Big Boy Hybrid. 78 days. Fruit to 1 pound. Note that this variety has 9000 seeds per ounce. Tr. pkt. (150 seeds), \$1.00; ½6 oz., \$2.50; ½ oz., \$4.50; ½ oz., \$8.50; ½ oz., \$16.00; 1 oz., \$30.00.

Wonder Boy. Extremely large, red, quality Tomatoes of excellent flavor. Tr. pkt., \$1.00; ½6 oz., \$2.50; ⅓ oz., \$4.50; ⅓ oz., \$8.50; ⅙ oz.,





## VEGETABLE SEEDS FOR FLORISTS—Continued

## **CUCUMBER**

(About 1000 seeds per oz.). 1 oz. for 80 hills or 200-ft. row. Distance between rows 3 to 6 ft.

#### • BALL EARLY HYBRID

New, heavy yielder. Size similar to "Straight 8", color dark green. It is a white spined, slicing type, earlier than Burpee Hybrid and has some resistance to downy mildew and mosaic.

Tr. pkt., 50c; ¼ oz., \$1.40; 1 oz., \$4.20; 4 ozs., \$12.50.

Seedless Supreme. XE)HYBRID Best of European forcing types. Will outyield any outdoor variety we know. Form 12-14 in. fruits without pollination. 100 seeds 50c; 1000 seeds, \$4.50.

1 oz. 4 ozs. Chicago Pickling. 6 in. 60 days .....\$0.25 \$0.85 \$2.50 Straight 8. Deep green; early slicer .... .30 1.00 3.00

#### **EGGPLANT**

(About 6000 seeds per oz.) Sow in February or March for plant sales. Space plants 18-24 in.

#### BEAUTY HYBRID =

IN HYBRID Our trial ground proved this new Ball Hybrid to be considerably earlier and more productive than the regular Black Beauty. Fruits are a little more oblong and are produced on strong, erect plants. % oz., \$1.45; ¼ oz., \$2.60; ½ oz., \$4.30; 1 oz., \$7.80.

l oz. 4 ozs. 1 lb. Black Beauty. Popular market variety.
Dark purple. Broad, egg-shaped . . . . . \$0.60 \$2.00 \$6.00 Fort Myers Market. Oval fruits carried well above ground. Quite resistant to disease and excessive heat. ½ oz., 45c.. New Hampshire Early. Medium sized, .80 2.70 8.00 oval fruits bred for northern climate. Prolific ..... .85 2.85 8.50

#### - HERBS -

### Sell an Herb Garden!

An assortment of Herbs, ready for sale in Ball PlanTrays, make an ideal merchandising package. Or for the customer who wants to have more of one kind, have flats of 12 or 25 plants of one kind ready. More and more frequently home garden and housekeeping magazines are stressing the use of herbs in cookery. Take advantage of this free publicity and let your customers know you are ready to fill their needs. Leaflets describing each variety with collection offers.

Basil Borage Coriander Anise Sweet Fennel Savory Chervil

Prices above 8, each: Tr. pkt., 20c; 1 oz., 60c.

Sweet Marjoram Sage

Prices above 2, each: Tr. pkt., 20c; ½ oz., 60c.

Rosemary Thyme Prices above 2, each: Tr. pkt., 20c; ¼ oz., 60c.

#### COLLECTIONS

Tr. pkt. each of above 12 Herbs . . 60c pkt. each of above 12 Herbs (approximately the same number of seeds of each variety) . . . . . 6.00 See also Chives and Parsley.

#### KALE

Danish Grown

l oz. 4 ozs. 1 lb.

(About 7000 seeds per oz.)

Dwarf Green Curled. Very hardy .....\$0.30 \$1.00 \$3.00

### KOHLRABI

(About 7000 seeds per oz.) loz. 4 ozs. 1 lb.

• Early White Vienna. Standard sort for forcing and home garden. Globe-shaped .. \$0.40 \$1.25 \$3.75

#### LEEK

(About 9000 seeds per oz.) More delicately flavored than the mildest Onion. Has a decided sweet flavor. Cooked and served like Asparagus. Grow for plant sale like Onions. Stores well; extremely hardy. 1 oz. 4 ozs. 1 lb.

Elephant. 150 days. 8-in. stems. Best strain of this fine "Asparagus Onion" ......\$0.45 \$1.50 \$4.50

### LETTUCE

(15,000 seeds per oz.; 1/4 oz. for 100-ft. row). Lettuce PLANTS are readily transplanted in plant bands. Sow March 15 or 4 weeks before setting out plants. Space 14x18 in. l oz. 4 ozs. 1 lb.

Grand Rapids Forcing. Mildew-resistant. LOOSE-LEAVED variety. Best early ... \$0.25 \$0.80 \$2.40 Bibb Forcing. Butterhead type of finest flavor. Demands even temperature ..... .30 1.00 3.00

## STANDARD VARIETIES

Great Lakes. New outstanding HEAD Lettuce; slow to bolt. "All-America" Winner.

Imperial No. 44. Sure HEADING Iceberg type. Recommended for plant sales. 1.70 5.10 .50 1.60 4.80 Pennlake. "All-America Winner". An early Iceberg type with smaller ribs than Great Lakes. Withstands heat ..... 60 2.00 6.00 Salad Bowl. LOOSE-LEAVED. Early (45 days), stands summer heat very well ... .60 2.00 6.00

### MELON MUSKMELON

(1000 seeds per oz.)

Super Market. 85 days. Thick, deep salmon J'dy Pot flesh of excellent flavor; an exceptionally heavy yielder. Resistant to fusarium and downy mildew. 100 seeds, \$1.75; 500 seeds, \$7.90.

1 oz. 4 ozs. 1 lb. Golden Delight. A.A.S. Large, early. Hard shell, small seed cavity .........\$0.50 \$1.65 \$3.50 Honey Rock. 85 days. Flesh orange, sweet, and of finest flavor. Fusarium resistant. Good shipper ..... .50 1.65 3.50

WATERMELON

New Hampshire Midget. Early ...... .35 1.20 3.50

#### MELONS IN JIFFY-POTS

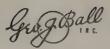
Photo shows one plant in each pot. Jiffy-Pot grown plants have the advantage of uninterrupted, speedy growth. Try them this year. Jiffy-Pots are listed on



Gro. g. Ball

## Vegetable Seeds for Florists (Continued)

Vegetable Seeds for	Florists (Continued)	
MUSHROOM SPAWN	PEPPER, Continued	1 11
<b>Dried &amp; Crumbled.</b> The same as "Bottle Spawn" but in ready-to-use form. ½ lb. will spawn about 35 sq. ft. Insect repellent, uniform quality. Leaflet sent with order.	Oakview Wonder. (Sweet.) 65 days.  (Early California Wonder.)	1 lb.
½ lb., \$1.50; 1 lb., \$2.85; 5 lbs., \$13.75.	Pimento (Perfection). (Sweet.) 72 days.	
ONION	Fruits smooth, conical ½ oz., 45c	7.50
ONION (About 9000 seeds per oz.)	Borne upright. Very pungent	
1 oz. 4 ozs. 1 lb.  Prizetaker (Valencia). Yellow, good keep-	Ruby King. (Sweet.) 68 days. Very productive	6.50
er, flesh mild	Sunnybrook. (Sweet.) Tomato-shaped fruits, Turn scarlet-red earlier than most	
Spanish). Globe-shaped ½ oz., 40c70 2.30 6.90 Yellow Bermuda (White Bermuda). Stand-	other Peppers. 70 days ½ oz., 40c75 3.00 Sweet Banana (Sweet Hungarian). Taper-	7.50
ard early. Flat, straw colored. ½ oz., 40c70 2.30 6.90	ing, 6½ in. long ½ oz., 60c 1.00 3.35  Sweet Bull Nose (Sweet Mountain).	10.00
DARCIEV	Mild-fleshed. 65 days $\frac{1}{2}$ oz., 35c65 2.20	6.50
PARSLEY  jugat (1/4 oz. per 100-ft. row). Roots are transplanted from out-	World Beater. (Sweet.) 70 days. Large, oblong, green, thick flesh. ½ oz., 35c	6.00
rectly, 8x8 in. 1 oz. 4 ozs. 1 lb.	Somewhat tapered, thick fleshed, extra early. Best for northern climates	
Extra Triple Curled. 75 days. Closely curled, very compact and productive\$0.30 \$1.00 \$3.00		
Paramount. 90 days. The most dwarf and curled Parsley. Uniform dark green30 1.00 3.00	resistant	9.00
PARSNIP	PUMPKIN	
(1½ ozs. per 100-ft. row). Sow early, space rows 18 in. Roots hardy. 1 oz. 4 ozs. 1 lb.	Small Sugar Pie. Early orange	2.50 2.50
Short, Thick. 100 days. Finest and earliest strain. Pulls easily, sweet delicate flavor\$0.25 \$0.70 \$2.10	RADISH	
PEAS	(1 oz. for 100-ft. row.)  Cherry Belle. 23 days. Round, red and very crisp	1.50
4 ozs. 1 lb. 5 lbs.  Alderman, 74 days. Tall\$0.25 \$0.60 \$2.50	• Early Scarlet Globe (Short Top). 23 days. An ideal florists "catch crop"	1.35
Thos. Laxton. 62 days. Medium	lcicle. 27 days. Best white for outdoors and forcing	1.35
,		
PEPPER	SPINACH (1 oz. for 100-ft. row.)	
(About 3000 seeds per oz.) Sow 6 weeks before outdoor planting. Germinate seeds warm. Space plants 16x24 in. Days indicated are from date plants are set out.	Giant Thick-Leaved (Nobel.) 45 days	1.20
California Wonder Select. (Sweet). 72 days. Standard of excellence in Sweet	throughout the summer. Suitable for greenhouse forcing in 50-60° temperature25 .40	1.20
Peppers. Extra thick walls. ½ oz., 40c\$0.75 \$2.70 \$7.50 Chinese Giant. (Sweet.) 80 days. The larg-	SQUASH	
est Sweet Pepper½ oz., 60c 1.00 3.35 10.00	(About 380 seeds per oz.)	
Golden Wonder. Golden fleshed California Wonder type	Butternut. 100 days. Winter Squash	3.75
Harris' Early Giant. See Vinedale.  Hungarian Yellow Wax. (Hot.) Tapering,	mer Squash. Edible when 4 to 14 in 30 1.00	3.00
6½ in. long. Very early. Plants small, productive	SWISS CHARD	
Large Bell. (Hot.) 65 days. Ribs pungent, otherwise mild½ oz., 60c. 1.00 3.35	. (1 oz. for 100-ft. row.)	
Large Cherry. (Hot.) ½ oz., 40c	Lucullus. Deep green crumpled leaves. Cool house temperature. Pick leaves	2.25
Merrimack Wonder. (Mild.) Thick flesh.	TURNIPS	
Recommended where growing season is short	Purple-Top, White Globe	1.25
.66 The liffy-Pot symbol indicates yas	vieties recommended for plant sales	





TOMATO IN JIFFY-POT Not hard to sell plants like this!

## Vegetable Seeds for Florists (Continued)

#### **TOMATOES**

(About 7000 seeds per oz.) We offer only the highest quality Tomato seeds from specialist growers. Sow seed 6 to 8 weeks before time to plant out. Days indicated are from date plants are set out.

#### SPECIAL FORCING VARIETIES

Ball Extra Early. (See page 64.) Highest quality fruit, yield and earliness. Tr. pkt., \$1.00; ½6 oz., \$2.25; ½ oz., \$7.50; 1 oz., \$25.00.

Ball Giant Hybrid. The addition to our F. Hybrid Tomatoes we have been looking for. An excellent producer of fine, solid red fruits. It is about two weeks later than our Ball Extra Early, above. Tr. pkt., \$1.40; \( \frac{1}{16} \) oz., \$3.20; \( \frac{1}{4} \) oz., \$10.65; \( 1 \) oz., \$32.00.

Waltham Forcing. The ideal forcing Tomato. Even sized, 4 oz. scarlet fruits, firm, good shippers, do not crack. Flowers self-pollinating. Early. Tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.00.

Michigan State Forcing. Wilt resistant. Deep scarlet fruits, average 56 ozs., globular, in large clusters. Flowers self-pollinating. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50. Globe "A". WILT-RESISTANT. Pink fruits a little larger than regular Globe. Tr. pkt., 50c; ¼ oz., \$1.00; 1 oz., \$3.00.

#### STANDARD VARIETIES

	l oz.	4 ozs.	1 lb.
Pan American. 75 days. U.S.D.A, intro-			
duction. Extremely wilt-resistant. Scarlet.	50 90	\$2.70	<b>ee 00</b>
Penn State Earliana. Extra early, red, large,		\$2.70	\$6.00
smooth, mild and solid ½ oz., 55c	.95	3.20	9.50
Ponderosa. Extremely large; purplish pink,			
few seeds, mild flavor. 85 days	.90	3.00	9.00
Pritchard (Scarlet Topper). Fine all-		3.00	9.00
around variety, heavy vielder; second			
early; WILT-RESISTANT. ½ oz., 45c	.75	2.50	7.50
Red Top. Improved Italian Canner. Cylindrical, 3 x 1½ inches ½ oz., 35c	1.10	3.70	
Rutgers, Certified. Red, smooth, thick		3.70	
walls-firm and mild. Does well even at a			
low fertility level. Favorite in sandy soil.	00	2.00	0.00
Sioux. 70 days. Red fruit. ½ oz., 50c	.90	3.00	9.00
	.,,	3.00	7.00
STOKESCROSS No. 5	_		
(New). This is an F <sub>2</sub> strain grown from	F <sub>1</sub> see	d. It m	ain-
tains most of the vigor and productivened Hybrid seed at a substantially lower prid	ess or	genuine	F <sub>1</sub>
Tr. pkt., 75c; ¼ oz., \$1.25; 1 oz., \$3.50	0; 4 oz	s., <b>\$12</b> .	00.
	l oz.	4 ozs.	1 lb.
Stokesdale, Certified. 75 days. Red, globu-			
lar; fine canning variety. ½ oz., 50c	\$0.85	\$2.80	\$8.50
Stone. 85 days. Valuable for market and canning; heavy producer; deep scarlet			
	.65	2.20	6.50
Valiant. 70 days. Globe-shaped, large, smooth red fruits ½ oz., 50c			
victor. 65 days. Extra early. Scarlet. De-	.90	3.00	9.00
terminate vine, takes little room			
½ oz. 45c	.80	2.70	8.00
Wisconsin No. 55. Red, early, and fine			
shipper. Large fruits with no shoulder cracks	1 20	4.00	12.00
		4.00	12.00
Red Cherry Yellow Plum Salads or preserves	es,		4 ozs.
Yellow Pear   salads or preserves	}	\$0.75	\$2,50 . 25c
Yellow Husk or Ground Cherry		74 OZ.	, <b>2</b> )c
TINY TIM			



# illupot

## JIFFY-POTS

## THE REVOLUTIONARY PLANT GROWING CONTAINER

This remarkable new pot is composed of 75% peat and 25% wood fibre and impregnated with 1.3% nitrogen, 1% phosphorus, and 1.6% potash. Roots grow right through the walls, permitting repotting into larger pots or benching without removing the Jiffy-Pots.

They are inexpensive . . . light weight . . . long lasting . . . provide excellent root aeration . . . need less watering . . . and save considerable

The most striking feature of Jiffy-Pots is the fast premium growth which they support . . . up to 50% faster and heavier than in other types of pots.

#### BEDDING PLANTS

The main advantage is that your customers need not remove the Jiffy-Pots when planting in the garden—this is the ultimate in convenience, an important factor in selling merchandise today. Plant growth is unchecked in transplanting with Jiffy-Pots as the roots are not disturbed. Plants no not require watering immediately after transplanting and may be held for days if necessary without plant injury. The peat in the Jiffy-Pot enriches the garden soil. All types of annuals such as Petunias, Marigolds, Snapdragons, Asters and vegetables such as Tomatoes, Peppers, Cucumbers and Melons, thrive in Jiffy-Pots.



Petunias are fast growing—require lots of moisture and feed. Just the job for a Jiffy!

#### **CUT-FLOWER CROPS**

CARNATIONS: Many Carnation growers throughout the country are using Jiffy-Pots extensively for potting their cuttings. The Joseph H. Hill Co. at Richmond, Ind., potted 150,000 cuttings in Jiffy-Pots. Dick Mikesell, vice-president of the Hill Co., wrote us, saying: "We found we were expending 97½ more man-hours for every 25,000 cuttings planted in clay pots than were necessary in using Jiffy-Pots. Once in the Jiffy-Pots the plants are never disturbed and consequently the comparative growth over the ones in clay pots is quite noticeable.

CHRYSANTHEMUMS: Cuttings can be potted in Jiffy-Pots and grown pot-to-pot for three or four weeks in much less space than required when benched. Then the Jiffy-Potted Mums are benched, pot and all, with the usual spacing. In year-round Mum programs some growers have gained additional production by this method. Garden varieties of Mums are being grown nicely in 3-inch Jiffy-Pots.

SNAPS: In year-round Snap programs Jiffy-Pots enable growers to schedule three full crops a year. Seedlings grow just as fast in Jiffy-Pots as if they were direct benched, and there is no check at any time-they are benched pot and all after 4 to 6 weeks in the Jiffies. The 4 to 6 weeks is saved for a flowering, income-producing crop.

ASTERS: Growers who have replaced other containers with Jiffy-Pots in their Aster program report greatly increased growth. Plants grow faster and heavier, suffer no check at benching. and produce premium flowers.

Carmen Walton, large bedding plant grower of Conroe, Texas, pro-vides plants that are more easily planted and give better results. William Stimmings of Newark Valley, Y. Y., uses Jiffy-Pots with special success for Delphinium between pricking off and planting out into the field for summer cut flowers.

"The Jiffy-Pot has been one of the best things to hit the greenhouse business in many years", says Jim Springer (left) and Robert Cashman of Cashman Greenhouses, Owaton-na, Minn. "No check to plants and no time lost on our Mum schedule."













Howard Wolfe and Alex Hirzel (above left) of Herzel Bros. Toledo, Ohio find they can take late cuttings of Poinsettias and thereby extend the normal propagating season. Jimmy Dinser of Dinser's Flowers, Royal Oak, Michigan, also grows Poinsettias and Hydrangeas in Jiffy-Pots with complete satisfaction. Shown (above right) with Si Randolph of Geo. J. Ball, Inc.

#### POT PLANTS

**GERANIUMS:** Growth is so rapid that two weeks can be cut from midseason and late propagations; even more from early fall schedules.

HYDRANGEAS: From rooted cuttings to 21/4-in. Jiffies to 5-in. finishing pots—this fast cycle is used by several Hydrangea growers.

**POINSETTIAS:** Fast growth in Jiffy-Pots enables later propagation and **extends the cutting season**—makes for a faster crop all around. Plants hold lower foliage well, keep dark green color better.

#### **VEGETABLES:**

Vegetables in Jiffy-Pots produce an earlier crop and heavier yield. Home gardeners and commercial growers alike have found Jiffy-Pots will keep their plants growing until weather permits setting out, then no check in growth because there is no transplant shock. Tomatoes do especially well in Jiffies, as do Peppers, Cucumbers, Melons, Cabbage and Eggplant.

#### PRICES PREPAID on 150 lbs. or more.

2 ½ - Inch	3-Inch
Quantity Per 1000	Quantity Per 1000
3,000 to 18,000 (3,000, \$21.75) \$7.25	1,500 to 9,000(1,500, \$19.88) \$13.25
21,000 to 72,000 6.75	10,500 to 49,500 12.25
75,000 up 6.25	51,000 up 11.00
Sold in cases of 3,000. Minimum order 3,060,	Sold in cases of 1,500. Minimum order 1,500,
35 lbs. per case.	35 lbs. per case.

Price NET. PREPAID in lots of 150 lbs. or more anywhere in the continental United States. Otherwise, f.o.b. West Chicago; Bayonne, N. J.; Allentown, Pa.; Toledo, Ohio; Houston, Tex.; Santa Paula, Calif.; San Francisco, Calif.; Portland, Ore.

NOTE: Jiffy-Pots may be combined with Market-Pak orders to make up the minimum weight of 150 lbs. to qualify for PREPAID shipment, provided entire order calls for shipment at one time.



## PLANTRAYS HOLD JIFFY-POTS

PlanTrays make a convenient carrier for Jiffy-Pots, both when handling the plants during the growing period and when transporting them. Below you will find listed various sizes of PlanTrays that are suitable for holding Jiffy-Potted Plants:



No. 2-X holds 12 21/4-inch or 6 3-inch.

No. 3-X holds 12 3-inch.

No. 2-SX holds 25 21/4 or 16 3-inch. No. 3-SX holds 36 21/4-inch or 25 3-inch.

See page 71.

## RETAIL GROWERS—GARDEN CENTERS

21/4-in. Jiffy-Pots Now Available Packaged for Resale to Your Customers

Add Jiffy-Pots to your garden supply line for **extra profits** this spring—offer Jiffy-Pots to your gardening customers for their annual and perennial flowers and vegetables—also ideal for cuttings of Mums, Geraniums, African Violets, shrubs and house plants.



JIFFY-POTS have been given **nationwide publicity** by garden editors and writers. Your customers will ask for them—be ready with these attractive 3-color packages of 24 2½-inch Jiffies.

Suggested retail selling price, 98c (your cost **59c**—40% profit). Minimum order one case, 24 packages, **\$14.12**. Immediate shipment **f.o.b**. West Chicago. Freight allowed on orders of 25 or more cases shipped at one time to one destination. Shipping weight, 9 lbs. per case.



## BIRD'S Vita-Bands and Pots



## VITA-BANDS

Nutrient-treated Vita-Bands, of a fibre resin construction, enable seedling and cuttings to make very rapid and luxuriant growth, especially in the early stages. They retain moisture and cut your watering time. Three types of Vita-Bands are offered:

VITA-BAND 10 for growing periods of 8 to 10 weeks. VITA-BAND D disintegrates in the soil when transplanted—no need to remove band.

VITA-BAND H for extra-long growing periods.

VITA- BAND	1½x1½x2½	13/4×13/4×21/2	2x2x21/2	2x2x3	2½x2½x3	3x3x3	4x4x3	4×4×4
10	\$4.70 per 1000 2000 per case (33 lbs.)	\$5.00 per 1000 2000 per case (38 lbs.)	\$5.25 per 1000 2000 per case (42 lbs.)	2000 per case	\$6.25 per 1000 2000 per case (63 lbs.)	\$6.90 per 1000 1000 per case (37 lbs.)	\$9.00 per 1000 1000 per case (50 lbs.)	\$11.25 per 1000 500 per case (33 lbs.)
D	\$4.85 per 1000 2000 per case (18 lbs.)	\$5.15 per 1000 2000 per case (21 lbs.)	\$5.35 per 1000 2000 per case (23 lbs.)	\$6.05 per 1000 2000 per case (28 lbs.)	\$6.30 per 1000 2000 per case (34 lbs.)	\$7.05 per 1000 2000 per case (40 lbs.)	\$9.25 per 1000 1000 per case (27 lbs.)	\$11.60 per 1000 1000 per case (35 lbs.)
н		\$6.10 per 1000 1000 per case (26 lbs.)	\$6.45 per 1000 1000 per case (30 lbs.)	\$7.55 per 1000 1000 per case (36 lbs.)	\$8.10 per 1000 1000 per case (44 lbs.)	\$8.50 per 1000 1000 per case (52 lbs.)	\$10.45 per 1000 500 per case (35 lbs.)	\$12.90 per 1000 500 per case (46 lbs.)

SOLD IN CASE LOTS ONLY

COMBINATION	1000	Flats	with
12,000 Vita-Band	10. Per	1000	Sets
Size No. 1	Size	No.	9

Size No. 1 Size No. 2 \$96.80 \$106.70

## Sold in Units of 500 Sets

| Tom | Thumb | Flats | Per 1000 | Per 1000 | Size No. 2 | \$44.70 | \$49.60 | Sold in cases of 250 |

Size No. 1 holds 12-13/4 x 21/2 Bands. Size No. 2 holds 12-2 x 21/2 Bands.

## VITA-POTS and RED POTS



VITA-POTS: Sturdy, resinous pots, nutrient-treated. Grow and ship in same pot. Widely used for small perennials and ornamentals of all kinds.

RED POTS: For shipping only. Protects root ball from breakage—light weight.

		RED	POTS	VITA	-POTS
Si	ze	Wt. I	Per 1000	Wt.	Per 1000
2	in.	10 lbs.	\$9.00	20 lbs.	\$14.60
21/4	in.	12 lbs.	9.00	25 lbs.	14.95
21/2	in.	16 lbs.	9.10	31 lbs.	15.50
3	in.	22 lbs.	9.60	43 lbs.	17.40
31/2	in.	32 lbs.	12.80		
4	in.	42 lbs.	15.50	76 lbs.	25.70
5	in.	66 lbs.	19.00	120 lbs.	33.40

PACKING: 4- and 5-inch, 500 per case. All others 1000 per case.

## VITA-M POTS



A new pot of molded pulp construction, closely resembling a clay pot in appearance and dimensions. Extremely light weight, but completely durable. Roots do not grow through the sides or bottom.

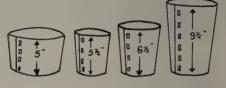
		Wt. per	Packed									Price	
Size		1000	Per case								P	er 100	0
21/4	in.	16 lbs.	1000	۰								\$10.7	5
			1000										
3	in.	27 lbs.	1000										
3 1/2	in.	37 lbs.	1000			ı		ı	ı	ı	ı,	20.5	0
			500										

#### VITA-GREEN POTS

Molded paper pots similar to Vita-M Pots, but lighter in weight. Pots are not removed

111	LIGILE	pranting.								
Size		Quantity	Weigh	ŧ					1	Price
		Per case	Per cas	е					Pe	r 1000
21/4		2006	17		 ۰	 ۰	۰		\$	7.10
21/2		2000	22		 ۰	 ۰	۰	۰		8.60
3		2000	31			 ۰		۰	0 0	12.40
31/2		1000	20		 ۰	 ۰		٠		14.30
4	in.	1000	31			 ٠				16.75

## PERENNIAL POTS



A better perennial pot for Roses, vines, shrubs and other perennials. Made of a tough material with hard, smooth coating inside and out. Solid stapled bottom with openings for drainage.

5-inch high pot for use as a Mum pan.

 $5\frac{1}{2}$ -inch high pot designed for small perennials and bulbs.

6½-inch high pot designed for larger perennials, junior Roses and vines.

9½-inch high pot designed for larger Roses, larger perennials such as Peonies, large vines and shrubs.

NOTE: Order by height—not top diameter

		Top	Wt. per	Per Case	Per
Heig	ht	Dia.	1000	of 200	1000
	in.	8 in.	325 lbs.	\$13.70	\$65.00
51/2	in.	5 in.	165 lbs.	10.00	47.50
61/2	in.	6 in.	220 lbs.	12.30	58.50
91/2	in.	7 in.	355 lbs.	14.50	69.00

Minimum order, case of 200 of one size, 3 cases at 1000 price. Case lots only.

## PEAT POTS

Pots made of peat similar in shape to Vita-M Pots, with a rim around the top. Nutrient-saturated to feed the plant not only at the start, but also as the pot disintegrates after transplanting.

		Quantity	Weight	Price
		Per Case	Per Case	Per 1000
21/4	in.	2000	22 lbs.	\$ 7.00
3	in.	2000	38 lbs.	13.00

## GRO-TAINER



Molded from hard durable fibre, the Grotainer is both a growing container and retail display. Attractive green in color,  $6\frac{1}{2}$  x 8 x  $2\frac{1}{2}$  inches deep.

Case of 200 (28 lbs.) \$11.60.

No. 2—(New). 75/16x55/16x25% in. Holds 6 2x2x2½ in. Vita-Bands.

No. 3-8%x6%x2% in. Holds 12 14x14x2½ in. Vita-Bands.

No. 4—(New). 9\%x7\%x2\% in. Holds 12 2x2x2\% Vita-Bands.

		Quantity Per Case	Weight Per Case				Price er 1000
No.	2	200	22 lbs.				\$44.00
No.	3	200					58.00
No.	4	200					68.50

# GALL BETTER PLANT BANDS

for Bedding Plants . . Chrysanthemums . . Perennials Nursery Stock . . Carnations . . Vegetables

#### Sometimes it's better to use Bands because:

Plant Bands are less expensive than pots . . . . firm, clean and disease-free . . . . hold more soil than a pot of equal diameter . . . . fit close—no waste space . . . . lighter to handle and store . . . . need less water . . . . keep soil ball intact . . . . rapidly filled—faster than small pots one at a time . . . . pack tightly and compactly for small plant shipping . . . . produce high quality plants as proven through years of use by growers everywhere.

#### It's always better to use Ball Bands because:

They are made of sturdy, long-fibered, finegrained basswood and fastened with rustresistant staples . . . . treated before shipping to prevent mildew and fungous growths . . . . air-dried and kiln-dried to eliminate excess moisture, making them lighter in weight for shipping (as much as 25% to 50% lighter than others) . . . . packed in two valuable greenhouse flats at no extra cost . . . . a "best buy" -tops in quality and low in price on the basis of a final delivered cost.

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Tomatoes and Peppers can be handled conveniently in Veneer Plant Bands. A PlanTray of twelve banded plants may be sold as a unit, or the individual plants taken out—no root disturbance in either case.



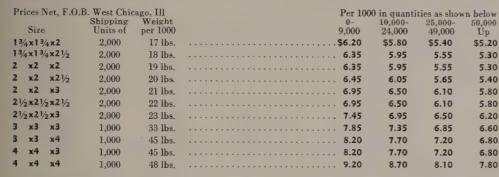
Delphinium-Veneer Plant Bands are

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especially nice for perennials



A well grown crop of Carnations in Veneer Plant Bands.



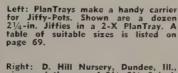
NOTE: Plant Band size 1 1/4 x 1 1/4 x 2 1/2 also stocked during the fall and early winter in Dallas, Texas, and shipped f.o.b. Dallas.

## BALL Veneer "PlanTrays"

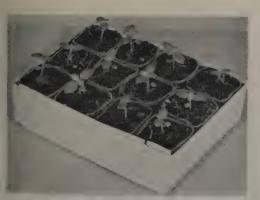
PlanTrays are designed to hold the various sizes of plant bands, or may be used without bands, as a small pack for plants. Several sizes are well suited for handling Jiffy-Potted plants. Ball PlanTrays are manufactured in the same careful manner as Ball Veneer Plant Bands. They are shipped knocked down but with one edge of the bottom stitched to a side so that they may be "set up" in a jiffy. Thoroughly air-dried and kiln-dried, they are lighter in shipping weight.

The X-type holds 12 bands. The SX-type holds 25 bands.

All	Prices, Net, F.O.B. our warehouse in West Chicago, Ill.	Prices	per 1000	as shown	below
	Ship		0-	1000-	2500-
Size	Dimensions Unit	s of per 1000	875	2375	Up
No.	1-X (5\%x7\%x2\%2-holds 12 1\%x2\%2 bands)12	5 200 lbs.	\$60.00	\$56.55	\$53.00
No.	2-X (6½x8½x2½—holds 12 2x2½ bands)12	5 240 lbs.	65.40	61.60	57.75
No.	<b>3-X</b> $(8\frac{1}{8}x10\frac{5}{8}x2\frac{1}{2}$ —holds 12 $2\frac{1}{2}x2\frac{1}{2}$ bands)	5 288 lbs.	72.50	68.25	63.95
No.	<b>4-X</b> (95% x12½ x2½—holds 12 3x3 bands)12	5 320 lbs.	79.50	74.90	70.00
No.	1-SX (9\%x9\%x2\top-holds 25 1\%x2 bands)12	5 288 lbs.	72.50	68.25	63.95
No.	<b>2-SX</b> (10½x10½x2—holds 25 2x2 bands)12	5 320 lbs.	79.50	74.90	70.00
No.	<b>3-SX</b> (13x13x2½—holds 25 2½x3 bands)12	5 400 lbs.	99.50	95.50	91.25



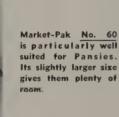
Right: D. Hill Nursery, Dundee, Ill., pioneered the use of  $2\frac{1}{2}x2\frac{1}{2}x3$  inch bands in No. 3-5X PlanTrays for growing evergreen cuttings in frames before lining out. Hills treat the bands and trays with a wood preservative so that they will stand up for two years. We can give you the formula for this.





Market-Pak No. 24 is a nice package for 6 plants such as Peppers, which often are sold in less than dozen lots.

Rooted cuttings of Geraniums do well in Market-Paks and can be sold at considerably lower price than in pots. Shown are six in a No. 42.



# **MARKET-PAKS**

New Sizes Added

Again this year we are introducing two new sizes of Market-Paks to give growers a wider selection from which to choose just the right "pak" for the job. New size Market-Pak No. 28 is a little larger and deeper than Market-Pak No. 24 but still small enough to qualify in the "budget-size" class. Market-Pak No. 30, also new, is of a new and interesting design. Its long, narrow shape permits planting in a long, double row, rather than in the usual more rectangular pattern.

Market-Paks have introduced a new era of selling plants in attractive, convenient packages.

Market-Paks make possible better display, self-service, elimination of losses. They have an attractive brick-red color and smooth finish . . . better drainage . . . lightweight . . . easy to handle . . . more durable—hard pressed wood pulp product contains no material toxic to plant growth . . . can withstand steam sterilizing.

## MARKET-PAK PRICES PREPAID on 150 lbs. or More East of the Rocky Mountains Only

Note lower prices of No. 24 and No. 60

No. 24.  $4\frac{1}{8}$  x  $5\frac{3}{4}$  x  $2\frac{1}{2}$  in. deep. Packed 250 per case—17 lbs. per case. Minimum order 250.

Quantity								P	ri	ce	per	100
250-750		۰	۰				۰		٠	. \$	30.	00
1,000-9,75	60	٠		٠	۰			۰	۰		27.	00
10,000-49	,75	0		۰		۰		۰	٠		25.0	00
50,000 uj	ο.			۰	٠	۰	٠	۰	۰		23.0	00

No. 28. 5\% x 5\% x 2\% in. deep. Packed 200 per case—16 lbs. per case. Minimum order 200.

Quantity					P	ri	ice	e per 1	000
200-800	0		٥				. 5	\$43.00	)
1,000-9,800								39.00	)
10,000-49,800								36.00	
50,000 up .	۰	۰	۰	۰	۰	٠	۰	33.00	)

No. 30. 3 x 10¼ x 2% in. deep. Packed 200 per case—18 lbs. per case. Minimum order 200.

Quanti	ty						P	ri	ic	e per 100	)(
200-800	٠				٠		۰			\$48.00	
1,000-9	,800			٠			٠		٠	43.00	
10,000-	49,80	00	۰	۰	۰	۰				40.00	
50,000	up	٠					۰		۰	37.00	

No. 42.  $5\frac{1}{2}$  x  $7\frac{1}{2}$  x  $2\frac{1}{8}$  in deep. Packed 200 per case—20 lbs. per case. Minimum order 200.

Quanti	ity						P	ri	ce	per	10	00
200-800	) .			۰			۰	٠	. \$	48.	00	
1,000-9	,800	٠	۰		۰	٠	۰	٠		44.	00	
10,000-												
50,000	up						۰			36.	00	

No. 60. 6 x 10 x 25% in. deep. Packed 125 per case—19 lbs. per case. Minimum order 125.

Quantity						P	E	ice	per 10	00
125-875		٠	٠		٠	٠	۰	. \$	64.00	
1,000-9,875	٠				۰		۰		58.00	
10,000-49,875		۰			۰	۰	۰	٠	53.00	
50,000 up .				٠					49.00	

Prices NET, PREPAID in lots of 150 lbs. or more east of the Rockies. Otherwise, F.O.B. West Chicago; Bayonne, N. J.; Allentown, Pa.; and Toledo, Ohio.

We will be glad to send you samples of any sizes on request.

NOTE: Market-Paks and Half Flats may be combined with Jiffy-Pot orders to make up the minimum weight of 150 lbs. to qualify for PREPAID shipment, if entire order calls for shipment at one time.

Top quality Petunias, grown in No. 42 Market-Paks, are proudly displayed by Mr. Harold Weber of Weber Bros., Oak Park, Mich.



Milt Stabelfeldt of Milwaukee, Wis., right, is showing Ben Luther of Geo. J. Ball, Inc., how well Snaps grow in Market-Paks. Ease of handling with reduced labor costs are important features with Milt.



Self-service Market-Pak racks at Thomas Flower Mart, Syosset, Long Island. Art Thomas in inset says: "Switching to Market-Pak and selfservice nearly doubled our volume."



"This is the way to sell bedding plants—an ideal container." Mrs. Joe Dinser of Dinser's Flowers, Royal Oak, Mich.







#### MARKET-PAK SIZES AND USES

No. 24. 41/8 x 53/4 x 21/2 inches. A budgetsize package suitable for a dozen upright annuals such as Marigolds or Zinnias spaced close or 1/2 dozen spreading plants such as Petunias or Pansies. This size is well adapted to areas and markets where younger plants are sold.

No. 28 (New). 51/8 x 51/2 x 23/4 inches. Also a budget-size pack suitable for a dozen plants, but allowing a little wider spacing than No. 24. Fit 8 to a flat 11 x 201/2 inches, inside diameter.

No. 30 (New). 3 x 10½ x 23% inches deep. A special new design for 12 or 14 plants set in a double row. Fits 7 paks to a flat 10½ x 20½ inches, inside diameter.

**No. 42.**  $5\frac{1}{2}$  x  $7\frac{1}{2}$  x  $2\frac{3}{8}$  inches.

This original Market-Pak has been used successfully by thousands of bedding plant growers as the standard unit of sale for a dozen well grown plants.

No. 60. 6 x 10 x 25% inches. Suitable for one or two dozen plants, depending on type and size or quality desired.

We will be glad to send you samples of any sizes on request.

# BALL HALF FLAT

The **Ball Half Flat** is made of the same asphalt impregnated wood fiber as the well-known Market-Pak.

Measuring 10 x 12 x 2½ inches, the **Ball Half Flat** is built with special rib reinforcing on the bottom—adequately drained with eight 3/8 inch holes on the sides and bottom, and has the same attractive, smooth finish and brick-red color of Market-Paks.

The **Ball Half Flat** can accommodate 40 bedding plants with approximately the same space per plant as is found in Market-Pak No. 42 with 12 plants—a little over 3 square inches per plant.

The **Ball Half Flat** will also be found useful for other general greenhouse purposes,

such as a seed flat (it is unnecessary to sterilize before using), in carrying small plants, etc.

#### PRICES

1111000	
Quantity Per 10	00
200-400 (200 for \$20.00)\$100.	00
600-4,800	00
5,000 up	00
Packed in cases of 200. Shipping weight 50 ll	
per case. Minimum order 200	

Prices NET, PREPAID in lots of 150 lbs. or more east of the Rockies. Otherwise, F.O.B. West Chicago; Bayonne, N. J.; Allentown, Pa.; and Toledo, Ohio.

NOTE: Market-Paks and Half Flats may be combined with Jiffy-Pot orders to make up the minimum weight of 150 lbs. to qualify for PREPAID shipment, provided entire order calls for shipment at one time.

Spry Marigolds give a good picture of plants that can be grown in Market-Pak No. 24 (top), Half Flat (center), and Market-Pak No. 42 (bottom).

Market-Paks are "the key to self-service of bedding plants" say the Carlsons of Janesville, Wis., prominent bedding plant growers. Pictured during our annual Field Day are (left to right) Mr. Carlson, Sr. and sons Russ and Tom. "We now grow 100% of our bedding plants in Market-Paks and will never go back to the large flats. Market-Paks are clean, durable, and just the right size. We couldn't do without them." Says Norman Newman of Newman's Flowers, Pittsford, N. Y.

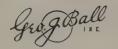
Jim Cude (left), wholesale bedding plant shipper of Sedan, Kansas, does a first rate job with Market-Pak No. 24. Jim is showing his growing-shipping flat of 8 paks to Robert Wright of Ball's.











# MERCHANDISING AIDS To Help You Sell More Plants

## PLANT DISPLAY RACK

- You can get at least three times as much merchandise in the same space compared to old-style ground or bench selling.
  - Shelves can be adjusted to lie flat or slanted downward for better display.
  - The two wheels make the rack easily portable—it rolls like a wheelbarrow.
    On top is a special holder for your Ball Sweet Sixteen posters.

  - And when bedding plant season is over, the rack displays all sizes of pot plants, dish gardens, and even flower arrangements to good advantage.
  - If you ever need to store the Plant Display Rack, it folds absolutely flat in one piece in less than a minute.

#### Specifications:

Oved-all length 39 inches. Finished in extra heavy zinc plate.

Top shelf 46 inches high, others 12 inches apart; extra 4-inch space between bottom two shelves. Top two shelves 11 inches front to back. Bottom two shelves 16 inches front to back.

1 to 9 racks, \$23.95 each; 10 or more racks, \$22.95 each. Shipping weight, 50 lbs., F.O.B. West Chicago, Ill.



# Molesta PLANT CARRIER Sells More Plants in Less Time



The unique design allows the Plant Carrier to nest in a compact stack. Alumipotted foliage plants sell readily in this convenient carrier.

This handy carrier for six small potted plants fills a long-felt need by the florist. Developed through the ingenuity of Adrian Molesta of Molesta Floral Co., Grand Rapids, Mich., it has increased sales of small plants in Mr. Molesta's own establishment and has been a great saver of selling time. Be one of the first to offer this easy carry-out package to your customers!

The Molesta Plant Carrier can be used for all types of pots-clay, plastic, aluminum or Jiffy-Pots. The 2-inch pot size will accommodate either 2-inch or 21/4-inch pots,

The 3-inch pot size accommodates the one size only. Made of sturdy tan cardboard with the inner surface varnished to resist damage by moisture, the carriers are shipped flat, in units of 200 2-inch or 100 3-inch. packed in cartons to conserve space.



PRICES						
	n	D	п	0	E	c

2-Inch Per 1000	3-Inch Per 1000
200-800 (200 for \$8.80)\$44.00	100-900 (100 for \$7.70)\$77.00
1,000-4,800	1,000-4,900
5,000 up <b>36.00</b>	5,000 up <b>69.00</b>
Packed 200 per case, shipping weight	Packed 100 per case, shipping weight
35 lbs. Minimum order 200.	38 lbs. Minimum order 100.

Prices net, F.O.B. West Chicago. Ill.

The Molesta Plant Carrier is ideal for Jiffy-Potted plants. Prevents damage through careless handling.

#### WOOD LABELS-Unprinted

Our labels are made from the finest quality selected clear White Pine and are guaranteed to meet all the requirements of the Nursery and Florist Industries.

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Silver	
Medal	
	STATE OF THE

#### POT LABELS Plain Painted\* Size per 1000 per 1000 NET. NET. PREPAID PREPAID 4x5/8 in. . . . . \$3.50 \$4.20 5x1/8 in. .... 3.75 4.50 6x% in. . . . . 4.10 5.00 . . . . 5.90 8x5/8 m. 7.20 10x% in. . . . 7.00 8.50 12x5/s in. .... 8.40 10.00

#### **GARDEN STAKES**

	Plain	Painted*
Size	per 1000 ·	per 1000
8x 1/8 in.	\$8.65	\$10.00
10x% in.	9.85	11.25
12x11/s in.	17.50	20.00
	NET DEEDAID	

#### COPPER WIRED TREE LARELS

		Plain	Painted*
Size		per:1000	per 1000
$3\frac{1}{2}x\frac{5}{8}$	in.	\$4.10	\$5.00
		NET, PREPAID	

#### PLEASE NOTE

#### ALL PRICES ARE PREPAID

MINIMUM ORDER-1000

Except 12x11/s in. Garden Stakes on which the minimum order is 500.

\*PAINTED LABELS are lightly coated with a thin paint preservative in accordance with government standards, to insure longer life and greater legibility.

#### WOOD LABELS, Printed

We offer Printed, 4-inch labels in convenient cartons of 100 of all Sweet Sixteen Varieties plus other popular varieties. Please turn to inside front cover for listing and prepaid prices.



# WELL PREPARED SOIL MEANS Well Produced Plants

Nothing is more important in obtaining good seed germination and in growing good plants in flats, paks and pots than a soil of the proper ingredients, well mixed and of the right texture. This is particularly true in growing bedding plants in Market-Paks and Alumi-Paks. Because of the small volume of soil in these containers, it is important that a well screened mixture be used that is not so light that they dry out too fast, nor so heavy that they alternate between a water-logged state and a hard-baked cake. Neither of these conditions is favorable to good plant growth.

Here at West Chicago we mix 3 parts good soil to one part peat. This mix is widely used, and is recommended at Ohio State University. Leafmold or well rotted manure can be substituted for peat. If the basic soil is exceptionally poor, either too gravelly or too hard-packed, additional organic matter will help. Of course, pebbles or broken pieces of pottery should be placed in the bottom of paks or pots to provide adequate drainage.

For breaking up the heavy field soil and pulverizing manure, a good Soil Shredder is invaluable. Complete mixing of the various ingredients can be accomplished. To obtain a nice fine soil for seed flats or pots, the new Krieger Soil Screener is a great time-saver over the old-fashioned hand screen.

#### KRIEGER SOIL SCREENER

- Fluffs, mixes and aerates soil for potting.
- Screens out trash and stones.
- Does not remove valuable humus—leaves soil in best possible condition.
- Screens as fast as you can shovel.
- Eliminates the back-breaking, time consuming job of hand
- So completely safe, a child can operate it.
- Light in weight-can be easily wheeled or lifted to where the job is to be done.
- Makes seeding and transplanting a pleasure.

#### SPECIFICATIONS

Capacity: About 60 bushels an hour. Over-all Size: 60 in. long, 24 in. wide, 45 in. high. Construction: Frame of heavy steel plate, galvanized mesh drum lifts off for easy moving. Metal chute channels out trash and stones. Ball bearings. Driven by ¼ H.P., 110 volt motor.

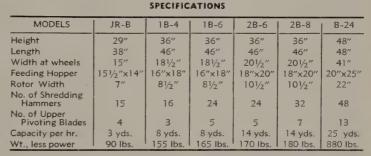


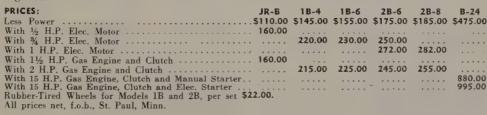
KRIEGER SOIL SCREENER IN ACTION! The trash and stones are being ejected at the right, while the sifted soil, well mixed with compost, falls into a pile alongside the machine.

### LINDIG SOIL SHREDDERS — A Size and Model for Every Job

The Model B Soil Shredders are designed to give fast, thorough, and complete shredding of soil, manure, peat, compost, etc. They are equipped with free-swinging ACTIONIZED SHREDDING BLADES of ALLOY STEEL, mounted on heavy steel rotors. The upper stationary blades are individually mounted with a spring controlling each blade. This NEW FEATURE gives close control over the shredded material as it allows only the required opening to be made for a non-crushable object to pass through the shredder. The body and hopper are fabricated of heavy gauge sheet

steel, rigidly welded together with rivets at points of stress. The frame is constructed of heavy angle iron. The discharge door is adjustable and can be regulated to control the flow of material as it leaves the shredder. The shredded material is ready for the potting table, greenhouse bench, outdoor hotbed, cold frame, and planting bed.







Model JR-B, though small has ample capacity for the small grower, and is an ideal second shredder for the large grower to use on the potting or growing bench.

Model B, engineered and constructed of finest quality materials to give you perfectly prepared soil, high ation. (Below.)





#### PROVEN USES OF ALUMIPOTS

Foliage plants, blooming plants such as African Violets, pot Mums, Begonias, Azaleas, Geraniums, Primulas, etc.

Spring plants such as fancy Petunias, Lantanas, Coleus, Ageratum, annual Phlox, etc.

#### SIZES and SHAPES

- 21/4 inch square Alumipots (lightweight).
  A special pot for growing and shipping purposes.
- 21/4 inch, 3 inch, and 4 inch standard round Alumipots.
- 4 inch Fern Pot. 3/4 depth. Round.

SEND FOR FREE SAMPLES

## Reynolds ALUMIPOTS\* and ALUMIPAKS\*

The Modern Way to Sell Plants!
Grow Top-Quality Plants in Bright Attractive Packages

Light Weight Long Lasting Easy to Store Less Watering Unbreakable Save Labor

Clean and Disease Free Broad-Based Pots for Stability

A growing-selling container—no need to repot or dress up for selling In any type of Plant Sales outlet, the Container helps sell the plant! "The Modern Way is the Packaged Way."

The modern aluminum pots and bedding plant packs—Alumipots and Alumipaks—are designed to sell plants as well as grow them. Available in plain silver or colors: red, green, and gold. State color wanted. One color only packed in a case.

#### ALUMIPOT\* PRICES per 1000, NET, F.O.B. West Chicago, III.

21/4-in. Square	21/4-ii	n. Round	3-in.	Round
Quantities Plain	Plain	Colored	Plain	Colored
2,000- 8,000 \$19.30	\$22.90	\$25.50	\$31.00	\$37.25
10,000-24,000 18.00	21.35	23.80	28.90	34.80
26,000-48,000 16.70	19.85	22.10	26.85	32.30
50,000 up 15.40	18.30	20.40	24.80	29.85
Packed per case (Min. order) 2000	2000	2000	2000	2000
Weight per case (Min. order) 19 lbs.	25 lbs.	25 lbs.	$37\frac{1}{2}$ lbs.	37½ lbs.

	4-in. Standard Pot	4-in. Fern Pot
Quantities	Plain Only	Plain Colored
1,000- 9,000	\$49.20	\$45.45 \$57.30
10,000-24,000		42.40 53.50
25,000-49,000	42.65	39.40 49.65
50,000 up	39.35	36.35 45.85
Packed per case (minimum order)		1000 1000
Weight per case (minimum order)		30 lbs. 30 lbs.



"Sparkling, clean Alumipaks help customers to serve themselves", says Louis Romence (right) of Romence Gardens, Grand Rapids, Mich.

Gay and colorful is the Alumipotted Chrysanthemum (left).

\*TRADEMARK Reynolds Metals Co.



#### **ALUMIPAKS**\*



NEW SIZE ALUMI-PAK No. 711 IS LARGER AND DEEPER

Sparkling, eye-catching containers for growing and selling bedding plants—both annuals and vegetables. Strong and durable. Two sizes are available:

No. 804.  $4\frac{1}{4} \times 8\frac{1}{4} \times 2$  inches deep. No. 711.  $5\frac{1}{2} \times 7\frac{1}{2} \times 2\frac{3}{8}$  inches deep. Price per 1000

| Price per 1000 | No. 804 | No. 711 | 1.000 | 4,000 | \$46.00 | \$52.00 | 5,000 | 9,000 | 46.00 | 48.00 | 10,000 | 24.000 | 42.90 | 47.00 | 25,000 | 49,000 | 39.85 | 46.00 | 50,000 | 49.00 | 36.80 | 45.00

Prices net, prepaid from factory on 200 lbs. or over; otherwise, F.O B. West Chicago, III. Allow 4-5 weeks on prepaid shipments. Packed 1000 per case. Minimum order 1000. Weight: No. 804, 34 lbs. per case; No. 711, 50 lbs. per case.

SEND FOR FREE SAMPLES

# PLASTICS For Greenhouse and Cold Frames

#### SEASONAL PLASTIC HOUSES

Of real significance, we feel, is the opportunity plastics present for construction of low cost temporary greenhouse space particularly for use in the spring. Most growers, particularly the small to medium-sized retail grower, are chronically short of space in the spring. Main reason: the bedding plant business which is profitable and good comes all at one time. Actually a great many growers all across the country are building plastic houses now for spring bedding use.

In constructing such a house, the main point is to keep it simple, sturdy, and low cost. A plain 2x4 frame work such as is illustrated in the photo is entirely adequate. Since the house is temporary in nature, many growers use a low cost 4 mil polyethylene material. The roof can be counted on to last from mid-March up until at least early June in almost any part of the country. For heat, some growers use temporary oil fired heaters such as used by construction firms to

heat buildings during their work. However, for bedding plants, the main requirement is to keep the plants well above freezing on the few cold nights.

Such a house can be recovered for use in the fall for such crops as Azaleas, Geranium stock, shaded fall pomps or standards, etc. Of course, it can also be used again the following spring.



A typical plastic greenhouse is the one we have at West Chicago. It is 25  $\times$  50 ft. and is covered with Polyflex 230. Picture was taken on our Field Day where many guests showed a great interest in plastics.

Adequate ventilation is important in such a house. Spring bedding plants will deteriorate quickly in a plastic house not properly ventilated. Actually, we find that installing standard cooling fans costs the same or very little more than building ventilators and does a definitely better job of ventilating. Of course, a fresh air inlet must be installed at the end of the house opposite the fans.

#### YEAR-ROUND PLASTIC HOUSES



A "sure fire" use for plastics! Cold frame sash. Low cost polyethylene on plain 1 x 2 frames is adequate to protect spring annuals from moderate cold if a single heating pipe is provided. Bob Wintz, of Ball's looking over a half flat of Petunias.

In the past several years we have built several test houses designed to explore various aspects of plastic greenhouse construction. The first of these was built at West Chicago in May of 1956. The house was  $25 \times 50$  feet, built entirely without ventilators, was equipped with standard pads and fans for cooling and ventilating, unit heaters for heat. The roof of the house was covered with nine different types of plastic in many cases tried under several different thicknesses, bar spacings, with and without wire, etc. The house was planted to year-round standard Mums. We felt this crop would be as sensitive as any to excess humidity problems, and would be in flower continuously, so would give us a good picture of crop response.

The house was operated right through the summer of '56 and the winter of '56-57 with temperatures to 17° below zero and at one time 11 inches of snow. Of the nine materials tested only one proved satisfactory for a year-round permanent plastic structure. That material is Poly-Flex 230. Although both the 5 mil and 10 mil have proven satisfactory in our tests, the manufacturer recommends 10 mil for covering greenhouses and 5 mil for cold frames.

The usual greenhouse construction is an inexpensive wood frame, with uprights 20 in. on center, providing a two inch overlap between 42 in. layers of Poly-Flex 230. Poly-Flex is rolled from the ground up one side, over roof and down in a continuous sheet. Lapped edges are stapled or taped and covered with protective strips of lath. This provides relatively air-tight construction.

Please write us for detailed working plans and list of materials needed for constructing a plastic house.

#### POLYETHYLENE

A clear plastic for covering greenhouses, cold frames; for chemical fumigation covers, greenhouse partitions for temperature control. Not suitable for steam sterilization. Remains pliable at 60° below zero.

Gauge	Wid	lth	Length	Shipping Weight	Price Per Roll	or more Rolls Per Roll
.002	9	ft. x	100 ft.	12 lbs	\$ 7.65	\$ 6.80
.004	3	ft. x	100 ft.	8 lbs	4.95	4.40
.004	6	ft. x	100 ft.	14 lbs	9.90	8.80
.004	$10\frac{1}{2}$	ft. x	100 ft.	24 lbs	17.30	15.40
.004	14	ft. x	100 ft.	31 lbs	23.10	20.50
.004	$16\frac{1}{2}$	ft. x	100 ft.	38 lbs	27.20	24.20
.004	20	ft. x	100 ft.	44 lbs	32.95	29.30
.006	6	ft. x	100 ft.	21 lbs	14.85	14.20
006	$10\frac{1}{2}$	ft. x	100 ft.	36 lbs	25.95	23.10
.006	14	ft. x	100 ft.	46 lbs	34.60	30.75
.006	$16\frac{1}{2}$	ft. x	100 ft.	53 lbs	40.80	36.25
.006	20	ft. x	100 ft.	64 lbs	49.45	43.95

Prices net, f.o.b West Chicago.

#### POLY-FLEX 230

A new plastic sheeting for covering greenhouses, cold frames, etc. Clear as glass. Tough though flexible.

GAUGES: .005 and .010.

WIDTH: 21 in., 25 in., 36 in. and 42 in.

LENGTH: 100 ft. and 300 ft. rolls carried in stock. Cut to any length, on special order.

PRICES	Per Square Foot
	.005 .010
	Gauge Gauge
Up to 1099 sq. ft	.\$0.08 \$0.16
1100 to 6499 s. ft	07 .14
6500 to 9,999 sq. ft	06 .12
Additional quantity discounts from lowest price	e above.
10,000 to 24,999 sq. ft	less 5%
25,000 to 49,999 sq. ft	less 7 ½ %
Over 50,000 sq. ft	

# Florist Supplies

PLASTIC FUMI-COVERS

For Steam Sterilizing



Black or Clear 3 Gauge Vinyl 3 gauge vinyl plastic is light weight, tough, and pliable. Temperature range 10° to 280°F. The most widely used sheeting in the agricultural industry because of its durability, weight, and cost. Net, F.O.B. Chicago, Ill.

							100 ft.	150 ft.
Wie	lth						Length	Length
$6\frac{1}{2}$	ft.			۰			\$20.80	\$31.20
8	ft.		٠	٠		۰	25.60	38.40
10	ft.	۰	٠				32.00	48.00
12	ft.	۰					38.40	57.60

#### Chloropyhll Green 8 Gauge Vinyl (A heavier grade)

Chlorophyll green sheeting is made only of extra heavy duty 8 gauge vinyl plastic. Temperature range 10°F, to 280°F. Chlorophyll green light transmission is less than 1%. Life expectancy of 8 gauge vinyl is 3 times that of 3 gauge vinyl. Net, F.O.B. Chicago, III.

	100 ft.	150 ft.		100 ft.	150 ft.
Width	Length	Length	Width	Length	Length
6½ ft	\$38.35	\$57.55	10 ft	\$59.45	\$ 89.20
8 ft	47.20	70.80	12 ft	69.60	104.40

#### HOSEBOYE

Watering is one of your most time-consuming jobs—why not use a HOSEBOYE? From our own experience, we find it does a better job of watering, and at a small fraction of the hand labor costs.



**HOSEBOYE** is an automatic, economical method of watering. You need only place this electric powered hose reel and sprinkler in position—turn it on—and go about your other jobs.

HOSEBOYE—Complete with 150 ft. \( \frac{3}{4}\)-in. inside diameter plastic hose, sled and 4 special Veejet Nozzles for Universal Application Assembly B; \$395.00. F.O.B. Cincinnati, Ohio.



#### **BLACK SHADE CLOTH**

Price per Sq. Yard Sewed Unsewed

BLACK CLOTH (For Day Length Control on Mums, etc.)

American Black Sheen ......\$0.65 \$0.59

On orders for less than minimum of 100 sq. yds. sewed or 300 sq. yds. unsewed, a charge of \$2.00 is added. Sold in 3 ft. widths or multiples of 3 ft. only F.O.B. New Jersey.

#### STEAM-FLO SOIL STERILIZER

Here's a machine that will sterilize a bed 5 x 50 ft. in 2 hours—maintaining from 8 to 10 lbs. pressure, burning from 4 to  $4\frac{1}{2}$  gallons of No. 1 fuel oil per hour AND you do not have to handle the soil.

Completely equipped including automatic water feed and low water cut off. Not including tires (uses 16 in, rim tires). Price: \$685.00. 25 ft. Steam Hose 1½ in. with two female connectors. Price \$40.00.

Aluminum tubing 1.9 in, outside diameter, flanged and drilled in 10 ft. lengths. Price: **42c** per ft.

Weston Thermometer, for soil heat testing, 2 in. head—8 in. stem. Price: \$7.50 each. F.O.B. Cincinnati, Ohio.



The Rough Bros. Steam generator—about 15 HP, capable of steaming 250 sq. ft. of bench area in 2-3 hours.



#### GRO-HOSE AUTOMATIC BENCH WATERER

Scientifically designed black Polyethylene hose. 2¼ in. wide, has FOUR holes spaced every 8 in. apart, waters the full length and breadth of your benches—AUTOMATICALLY.

Ideal for chemical fertilization. Installed in a few minutes and requires no attendance. Saves many man hours of labor. Operates on 1 lb. pressure. Keeps foliage dry.

Each length of "Gro-Hose" gently and thoroughly waters a two-foot strip. Two lengths (as shown) are needed for the average bench.

Headers made of copper tubing and brass couplings are used to connect "Gro-Hose" to your present water supply.

Gro-Hose is most effective when used in lengths of not more than 75 ft. in each direction. For example: we suggest that for a 100-ft. bench four 50-ft. lengths and a four way header be used and not two 100-ft. lengths and a two way header. For detailed information, please send for circular.

PRICES	:
HOSE	HEADERS
1-1000 ft \$0.09 1/2 ft.	Two-way, each\$3.00
1001-5000 ft	Four-way, each 3.75
O FOOD EL	01 2 2 0 0

#### Some Cultural Information on

# POT PLANTS for Mass Marketing

Flowering plants in 3- and 4-inch pots are surely gaining more favor every year. They serve so many useful functions in our present day economy that their popularity is bound to climb.

They provide inexpensive home floral decorations in an age when flowers are better liked than ever, but Americans continue to be typically price conscious. People will buy them for permanent house plants, temporary decoration, and to plant in the garden after enjoying them in the home. They make ideal gifts for many small occasions when buyers would not purchase more expensive flowers or plants. They can be used by all kinds of stores for decoration and promotions.

#### CULTURE

Except for timing and spacing, budget pot plants can be grown much like their larger brothers. Fundamental things like seed germination, watering, fertilizing, soil, temperature, light, humidity, propagation, and pest control are usually very similar no matter what size is grown.

Small pot plants can be finished in much less time than the usual pot crop, with more plants per square foot. This means good profits at a price that will sell.

Here are some typical examples of timing and spacing for 3-inch pot plants.

Variety		Spacing 3-in, Pots Center to Center	
Calceolaria	5 months from seed sown betwee	n	
	Sept. 1 and Dec. 31.	5 in.	50°
Cyclamen	Sow in January for following winter	r. 6 in.	50°
Mums	No long days, will flower according		
(see page 80)	to response group.	5 in.	60°
Begonia	5 months from seed in dark weather		
(Fibrous)	3 months in bright weather.	$4\frac{1}{2}$ in.	60°
Azaleas	4-6 weeks forcing time from fall-potted liners.		600
Cineraria	3-5 months from seed during	6 in.	60°
Cincialia	cool months.	6 in.	50°
Poinsettias	3 months, Sept. cuttings.	6 in.	60°
Kalanchoe	4 months from sowing to short days	O AILE	00
	3 months short days to flowering.	, 5 in.	60°
Christmas			
Cherry	Sow in May for Christmas.	$5\frac{1}{2}$ in.	50°
and Pepper		$5\frac{1}{2}$ in.	60°
Crossandra	7 months from sowing.	5 in.	65°
Hydrangea	Take tip or leaf bud cuttings, June		600
Primula	and July, for forcing Feb. April.	6 in.	60°
Saintpaulia	3-6 months depending on species.	$5-6\frac{1}{2}$ in.	45°
Dwarf Aster	6 months from leaf cutting or seed.		65°
Coleus	4 months from seed.	$5\frac{1}{2}$ in.	. 55°
Coleus	2-3 months from seed; 1 month from cuttings.	$4\frac{1}{2}$ in.	65°
Browallia	3 months from seed.	$5\frac{1}{2}$ in.	65°
Fuchsia	4-5 months from cuttings.	5 in.	60°
Geranium	2-4 months depending on seasons.	5½ in.	55°
Impatiens	3-4 months from seed:	5 /2 III.	33
	1½ months from cuttings.	5 in.	60°
Lantana	3-4 months from cuttings.	4½ in.	60°
Marigold	2-4 months from seed.	4½ in.	55°
Petunia	3-5 months from seed.	$5\frac{1}{2}$ in.	50°
Globe Phlox	4 months, in bright weather only	$5\frac{1}{2}$ in.	50°
Salvia	2-3 months from seed.	5 in.	60°
Torenia	3-4 months from seed	5 in.	50°
Alternanthera	2-3 months from cuttings.	$4\frac{1}{2}$ in.	60°



BALL RAINBOW COLEUS
One of the most popular items for mass sales.

#### SELLING

Outlets. Retail florists, garden centers, roadside stands, grocery chains, and variety stores can all fill the bill.

To make the most of small pot plants, an outlet should have:

- Heavy shopper traffic—most sales are on impulse, so many people must see the merchandise.
- Eye catching displays—all a part of impulse buying.
- 3. Cash and carry-keeps costs down.
- 4. Low markup—the way to high volume.

Pricing. Retail prices under \$1.00 are often figured safest for getting largest volume, but many successful merchandisers sell larger budget sizes in the \$1.00-\$2.00 bracket. In any case, mark the price clearly; it's a good selling point.

Low markups, always under 100% and even down to 50%, can still leave room for profit. The wholesale price should be high enough for the grower to make money. Retailers selling cash and carry need only low margins. By the way, we know of florists competing successfully with supermarkets selling the same flowers in the same communities.

Packaging. Some do and some don't. Packaging provides:

A retail unit protected from damage and needing no further wrapping after sale.

A clean, neat unit easy for the consumer to

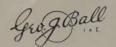
handle.

Protection during shipment and handling.

Kinds of packages include:

Cellophane bags—bag encloses entire plant and pot, is stapled or heat-sealed; cellophane tops fastened to cardboard pot holders; cardboard boxes with cellophane windows.

Promotion. "Special this week only, cash and carry" is a natural for small pot plants—a weekend sale of one specific pot plant. Some merchandisers keep up a year-round program, using something different as often as possible. Prices should be clearly marked on the advertising and on the plants. The "special" signs are most effective when clearly visible from the street.



# MUMS—a Bedding Plant, Too!



Use of Mums—garden or hardies mostly—as a spring bedding plant has more than doubled the past three years! They are fast becoming a major item on the spring plant list. Main reasons: they are easy to grow, and they are at their best in autumn when most other garden subjects are "over the hill." Here are the ways they are used:

#### Garden Mums-flatted or potted for spring sales

No doubt the most important single use made of Garden Mums for spring sales.

They may be handled several different ways: As potted plants—cuttings are potted to  $2\frac{1}{4}$ - or better to 3-inch pots in early April, pinched soft in 2-3 weeks, are ready for sales as bushy well developed plants for late May. Same watering, feeding, etc., as anuals. No light or shade. Night temperatures of  $50^{\circ}$ , or better yet  $45^{\circ}$  (and cool days), retard the tendency toward premature buds. Lighting the plants 3 hours per night will also help avoid buds.



Garden Mums in smaller pots are becoming big sellers in the spring plant trade. Here's a 3inch plant, Jiffy grown, pinched, and ready to go.

More and more growers are shifting over to use of newer growing containers for spring garden Mums. The Jiffy-Pot (see page 69) is ideally suited for this.

#### As flatted plants

A substantial part of these spring garden Mums are grown in the new small size "by the dozen" type flats—of which the Market-Pak (page 72) and the Alumipak (page 76) are good examples. Handled in this way, the grower's cost is considerably less than in individual containers.

#### Garden Mums IN FLOW-ER in 3's for spring.

Here's an unusual, showy, yet easy to grow item for your spring trade!

A single cutting (garden variety) is potted to a 3-inch pot March 2, pinched March 9, and grown at 60° nights. No shade, no lights—and they'll be nicely in flower by early May! They make colorful, highly salable plants—especially in the bright new Aluminum pots. They are a low cost item (some growers offer them for 39c cash and carry). Best of all, after your customer has enjoyed the flowers on them for a couple of weeks, the plant can be cut back, planted out to his garden—and it will flower again in the fall. Some growers attach little tags to them, pointing out their use for fall flowering and giving brief instructions (cut back half way down, plant out, water, feed, pinch till August 1, etc). Quite a few of these Garden Mums in spring are flowered in larger pot sizes too—4- to 5- and even some 6-inch.

Many growers use these garden plants in flower combination boxes.

Where the grower wants to flower spring garden Mums for a certain date (Easter, Mother's Day, Decoration Day), they can be brought in on time by use of lights, then black cloth shade. Schedules to flower the late September-early October garden kinds follow:

Easter	Plant	1958 Light	Shade	Pinch
(April 6)	Jan. 23	Jan. 23-30	Mar. 15	Feb. 13
Mother's Day (May 11)	Feb. 27	Feb. 27- Mar. 5	Mar. 15	Mar. 20
Decoration Day (May 30)	Mar. 13	Mar. 13- Mar. 19	Mar. 20	Apr. 3

#### **Varieties**

For those not familiar with the many garden varieties available, Collection No. 4 listed below will provide varieties suitable for flowering in pots in spring. Collection No. 2 will provide a good assortment of colors and flower types for general garden use. Collection No. 2 would be best where plants are to be offered in spring not in flower.

Your 1958 BALL MUM AND PLANT GUIDE includes a full list of garden varieties and specific variety recommendations for various purposes.

#### SPECIAL COLLECTIONS of GARDEN VARIETIES

For growers who are not familiar with Garden Varieties, but who want a well balanced assortment, we offer the following collections, which include the better varieties.

COLLECTION No. 1
Taller varieties
for cutting.

COLLECTION No. 2
For bedding
or borders.

COLLECTION No. 3
50% for cutting;
50% for bedding.

COLLECTION No. 4
For Easter, Mother's Day or Memorial Day pots.
(State which).

COLLECTION No. 5 Cushion Varieties Only.

**Prices** above 5 collections, each: 300 to 450 cuttings, **\$6.00** per 100; 500 to 950 cuttings, **\$5.75** per 100; 1000 or more cuttings, **\$5.50** per 100. Minimum collection, 300 cuttings. More than 300 cuttings must be ordered in units of 50. Prices effective January, 1958.



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